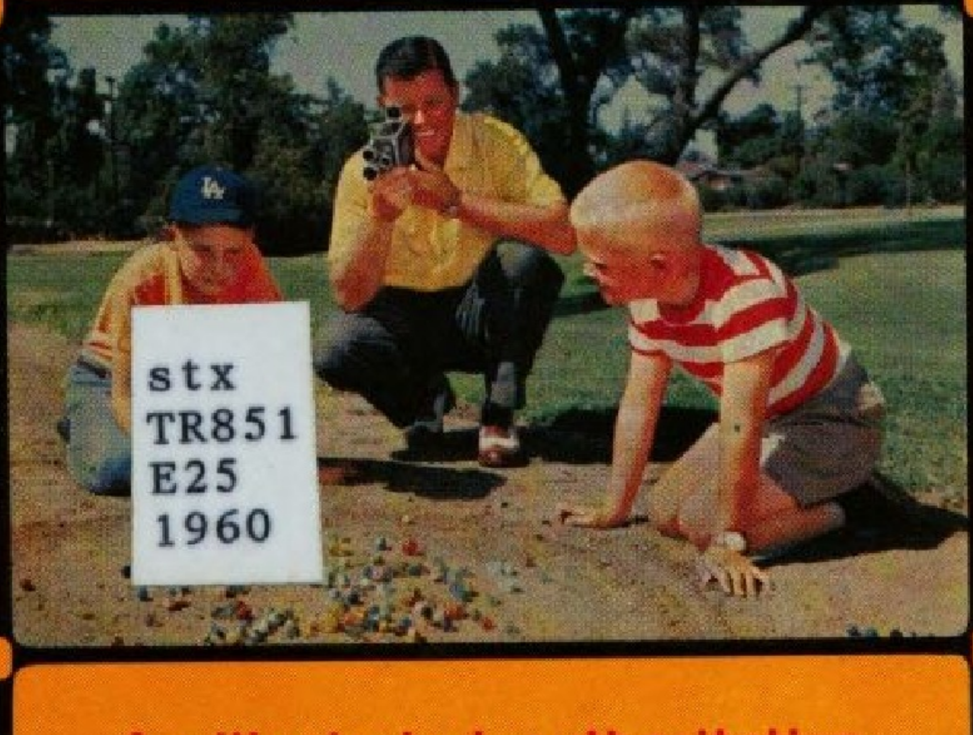
50¢
GIANT
ARDINAL
DITION
C-82

THE Kodak*

HOME MOVIE

Camera Guide

BY THE EDITORS OF THE
EASTMAN KODAK COMPANY



stx
TR851
E25
1960

An illustrated, authoritative manual which shows you how to make better home movies—indoors and out

RIGINAL
NOT A
EPRINT

*TRADEMARK

THE OHIO STATE UNIVERSITY
UNIVERSITY LIBRARIES

From the John A. Flory
Collection of Cinema
Literature

tion scenes that will be
s hundreds of practical
available for only 50 ¢ .
terms .
e Kodak guides , the easy

WHAT'S ALL THE SHOOTING ABOUT?

People everywhere have discovered that home movies are easy to take and fun to show. Today anyone can film the wonderful action scenes that will be tomorrow's most cherished possessions.

THE KODAK HOME MOVIE CAMERA GUIDE is designed to help you preserve those moments you want to relive, to advise you on what kind of equipment to use and the correct way to use it. It gives hundreds of practical hints for planning movies that are natural, interesting and beautiful.

For your still pictures, in color or black-and-white, get GC 58, THE KODAK CAMERA GUIDE, another important aid now available for only 50¢. Filled with hundreds of clear, show-how illustrations, this book reduces the so-called mysteries of photography to simple terms.

Your pictures will give consistently satisfying results—no matter what kind of camera you choose—when you use these authoritative Kodak guides, the easy way to surer shooting.

Also by the Editors of the Eastman Kodak Company

THE KODAK CAMERA GUIDE

Published by Pocket Books, Inc., in a GIANT CARDINAL edition.

THE

Kodak*

HOME MOVIE
CAMERA
GUIDE

BY THE

EDITORS OF THE
EASTMAN KODAK
COMPANY

*Trademark

CARDINAL EDITION
POCKET BOOKS, INC. • NEW YORK

This original GIANT CARDINAL edition is printed from brand-new plates made from newly set, clear, easy-to-read type.

THE KODAK* HOME MOVIE CAMERA GUIDE

GIANT CARDINAL edition published May, 1960
1st printing......................March, 1960

SK
TR [illegible]
[illegible]
[illegible]

ɔe .
ɔoks , Inc. , New York , and on
I.Y.
other countries .

L

*"Kodak" is a trademark.

Copyright, ©, 1960, by the Eastman Kodak Company, Rochester, New York. All rights reserved. *Published by Pocket Books, Inc., New York, and on the same day in Canada by Pocket Books of Canada, Ltd., Montreal. Printed in the U.S.A.*

GIANT CARDINAL editions are distributed in the U.S. by Affiliated Publishers, Inc., 630 Fifth Avenue, New York 20, N.Y.

Notice: GIANT CARDINAL editions are published by Pocket Books, Inc. Trademark registered in the United States and other countries.

▶ Contents

Page

Foreword 11

1. ***You Already Know How to Make Home Movies!*** 15

Simplest of all pictures to make 15

Is that all there is to moviemaking? 18

2. ***Choosing the Movie Camera That's Right for You*** 22

Size is the factor that decides cost 22

Size—again the factor 24

The yardstick to camera choice 25

Exposure guide—or exposure meter? 26

The fundamentals of movie exposure 26

The exposure-guide method 27

The exposure-meter method 28

Page
Roll-loading—or magazine-loading? 29
A fast lens—or an extra-fast one? 30
Focus—or no focus? 31
One lens—or a choice? 45
Moviemaking's four essentials 48

3. ***Telling the Movie Story*** 49
Most subjects "write" their own movie script .. 49
Making a family "feature film" 52
No need to pose for movies 55
Shoot it as you'd say it 55
  A Day with Diana 56
  Your Garden 60
  A Birthday 63
  A Day at the Zoo 65
  Christmas 68

4. ***Before You Start Shooting*** 73
Two types of light—two types of film 74
One film can do double duty! 74
Another filter you may want 75

Page

No problem if you use filtered indoor film outdoors! 76

Take your time when loading your camera 76

Steady does it! 86

A choice of "whoa!"—or woe! 87

Good sighting makes the good shot 89

A caution on close-ups! 90

Two more items! 91

5. ***Getting the Best Results Outdoors*** 93

Compare the camera's eye to your own 93

Subject brightness is also a factor 96

Surroundings are another factor 97

Shooting out of the sun on sunny days 99

Side and back lighting 100

Shooting when there's no true sunlight 101

Shooting early—and shooting late 102

Where—and how—exposure meters can help 103

Where meters—alone—can't do it all 104

When things are extra-dim 105

Meters themselves vary 106

When you speed up—open up 106

Sports—the top slow-motion opportunity 108

Page

6. ***Shooting Movies in Your Home*** 109

Indoor light—a known and constant factor 110

No question about the film to use 111

Movie lights—easy to buy and to use 111

Subject brightness counts, too 112

Don't mix your light! 113

Close—but not too close 114

The role of independent exposure meters indoors 116

7. ***Children—Finest Movie Subjects of Them All!*** 126

The best times to make movies of babies 127

How to make baby close-ups 128

Film a child's diary as you'd write a child's diary 129

More years—and more adventures 131

8. ***A Little More Lore About Lenses*** 133

If your lens adjusts for focus 134

Added range through an added lens 136

Time for a tripod 138

9. ***So Much for the "What"—Now, from Where?*** 140

Page

10. ***Shooting the Sun*** 144

Practice soon makes perfect 145

Always pleasing—always useful 146

11. ***Sports, Shows and Other Nighttime Spectacles*** 147

Lighted fountains, buildings and monuments .. 150

Fireworks and fires 150

12. ***There's Real Magic in Your Movie Camera*** 152

Now you see 'em . . . and now you don't 154

Still another version of stop-motion 154

Duck! 155

Fades and dissolves 155

Just for laughs 169

13. ***Dressing Up Your Movie Footage*** 171

First, film assembly—and then 172

The cost and use of editing equipment 173

So that you can see what you're doing 174

What's the best editing procedure? 175

Making extra shots for extra interest 177

Page

How about titles? 179

Nontitle uses of a titler 181

The proper care of movie film 182

The best way to insure film safety 184

14. ***Showing Movies—What All the Shooting's Been About*** 186

How bright should your projector be? 186

How much versatility can you use? 187

How "easy" a projector do you want? 187

A good screen—always a projection "must" 188

Home movies for home folks 189

The "how" of showing movies 190

Party-time programs 191

Glossary 195

hree million and more

s of your family and your
rom many feet away or
he nearest thing to life

nd his dog run across a

▶ Foreword

THIS IS the story of the fun, and the ease, and the economy of making home movies. It isn't fiction. It's a fact—as known to the three million and more American families today shooting and showing their own movie records.

Come to think of it, there's nothing fictional about movies, although they tell the most fascinating story in the world—the activities of your family and your friends, at home or on a holiday. For movies, instead of using words and sentences, bring you color and action pictures shot from many feet away or made close up, and of several seconds' duration or with the brevity and impact of an exclamation point. Movies, in fact, are the nearest thing to life itself!

That's why, incidentally, movies are so easy to take. You don't have to arrest life in movies, to make it hold still. A youngster and his dog run across a lawn; the quiet motor of an observant movie camera "runs," too. And the boy and his dog run again, in full-color movies!

Movies—natural to look at—are completely natural to make.

THE KODAK
HOME MOVIE
CAMERA
GUIDE

nto a boat , row out from
d might have been a bit

CHAPTER
1

ıction record of family
ing home movies ! "
ble - we'll shortly ease
e the movies at all . The

▶ You Already Know How to Make Home Movies!

In the somewhat more rugged years of the past, a reasonably popular way of teaching nonswimmers to swim was to coax them into a boat, row out from shore a ways—and toss them overboard. Those who survived—and almost all did, fortunately—confessed that although the method might have been a bit abrupt, it was also an extremely effective way of learning to stay afloat.

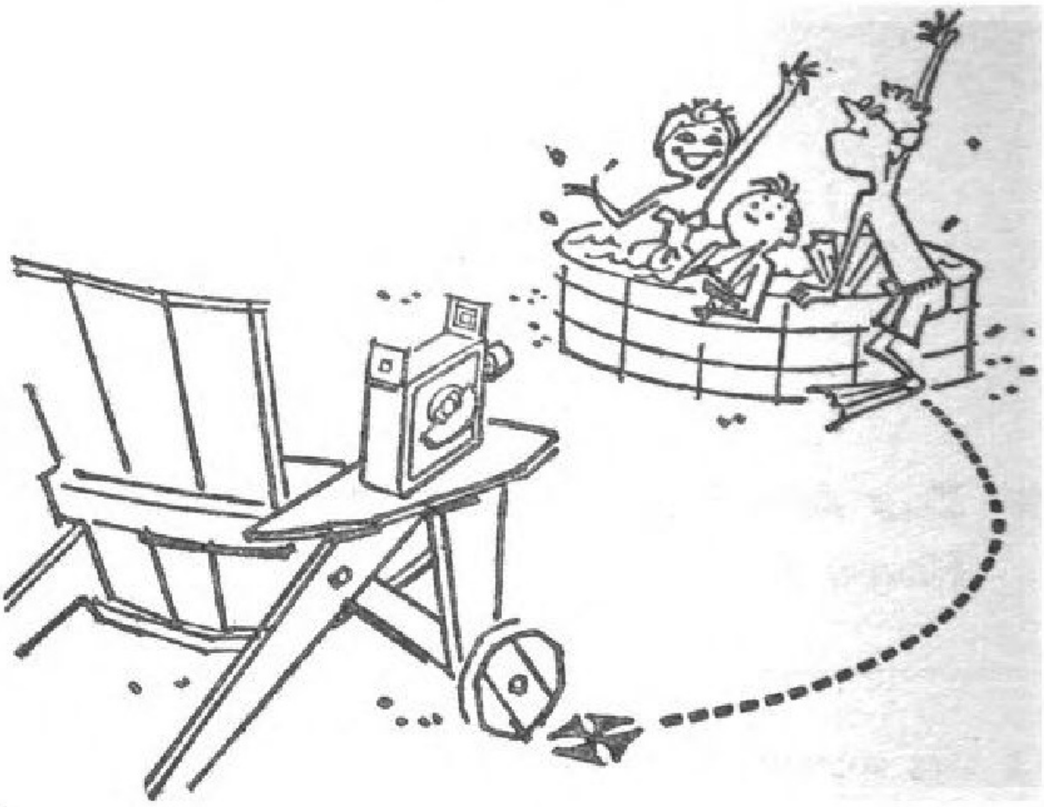
Somewhat similarly, a lot of people, with equal lack of reason, are timid about making home movies. They want a color-and-action record of family doings and holidays so badly they can almost taste it. But—"Shoot home movies! ME? Why, I don't know the first thing about taking home movies!"

Yet, this isn't true. Just about everyone knows the fundamentals of moviemaking. To prove our point—if, of course, you're agreeable—we'll shortly ease you overboard into the pleasant waters of personal movies!

▶ Simplest of all pictures to make

Everyone who has made snapshots—and who hasn't?—knows most of what needs to be known to make movies. For *you* don't make the movies at all. The camera and film do. The only real difference between

port , set the exposure lever
era click open and shut . A
ooting . A movie camera is
 motion picture . Movement
minutes . Here's a movie

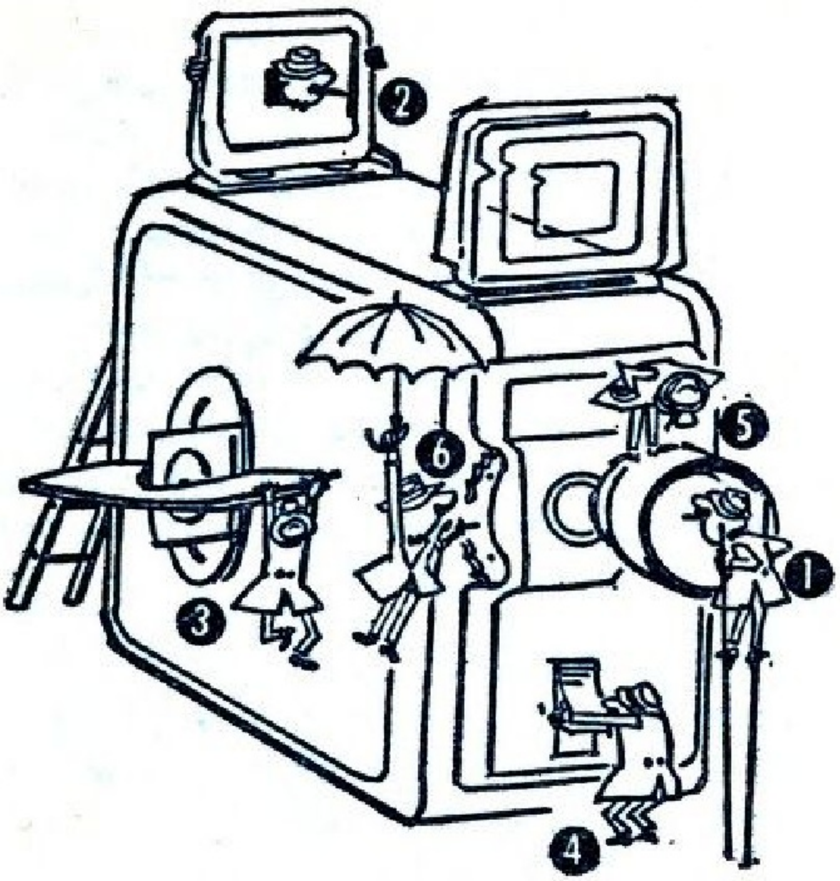


Want proof that it's really the camera and film that make the movie? Just wind up a movie camera, place it on some steady support, set the exposure lever in running position—and duck around to get into your own movies.

a snapshot camera and a movie camera is that one clicks at a subject and the other purrs at it. A spring makes the snapshot camera click open and shut. A spring motor does the same thing for a movie camera as its length of film flows past the back of the lens.

Camera loading is equally easy. So's sighting. Movie-film exposure is, if anything, even simpler than that of carefree snap shooting. A movie camera is especially easy and sure in use for the very reason that it *does* make movies. Movement in front of a movie camera won't blur a motion picture. Movement is the thing a movie camera thrives upon. Instead of trying to freeze action, it records it!

And so, although a manual is supplied with every movie camera to tell you how to operate it, let's not even look at it for a few minutes. *Here's a movie camera already loaded with full-color film.*



ress to make the camera
With others , you didn't .
nbers on this lens - 16 ,
h I don't have to , with

YOU'RE ON YOUR OWN!

Hmm. So this is supposed to be a lot like a snapshot camera, eh?

Here's the lens,[1] that's easy enough. And here, obviously, is the finder to look through.[2]

This dingus must be what you use to wind up that spring motor.[3] Like s-o-o-o. And—let's see—this then must be the button you press to make the camera go.[4] Whoops! That's it, all right!

Now then. With some snapshot cameras I've used, you had to set the lens for the number of feet between yourself and your target. With others, you didn't. "Focusing"—that's what they call it—and it looks like you don't have to focus this movie camera, either.[5]

Umm—yet there are some numbers on this lens—16, 11, 8—and all the way to 1.9. They must be exposure numbers.[6] Never have known what they actually meant—and it looks as though I don't have to, with this camera. I can read and understand words, all right—and here, right alongside the lens, it says "Bright Sunlight." That's what I've got a lot of outdoors right now—so I'll just point this gadget at "Bright Sunlight." Well, what do you know! It set the lens to the right opening at the same time! Nothing hard about *that*.

Actually, we've made home movies seem a little difficult here. For, with many new cameras today, you can make movies by a sight-and-shoot method. All you have to do is wind the camera and point it. *The lens automatically adjusts itself to light conditions.*

More about this on page 29!

Now what?

Nothing else? I'm set to *shoot*?

Whoopee! GANGWAY FOR A MOVIEMAKER.

(Fade-out . . . accompanied by the sound of a rapidly opening and closing screen door!)

▶ *Is that all there is to moviemaking?*

Yes. And also no.

That's just about all there is to getting sharp and colorful pictures. But those pictures may or may not be *movies!*

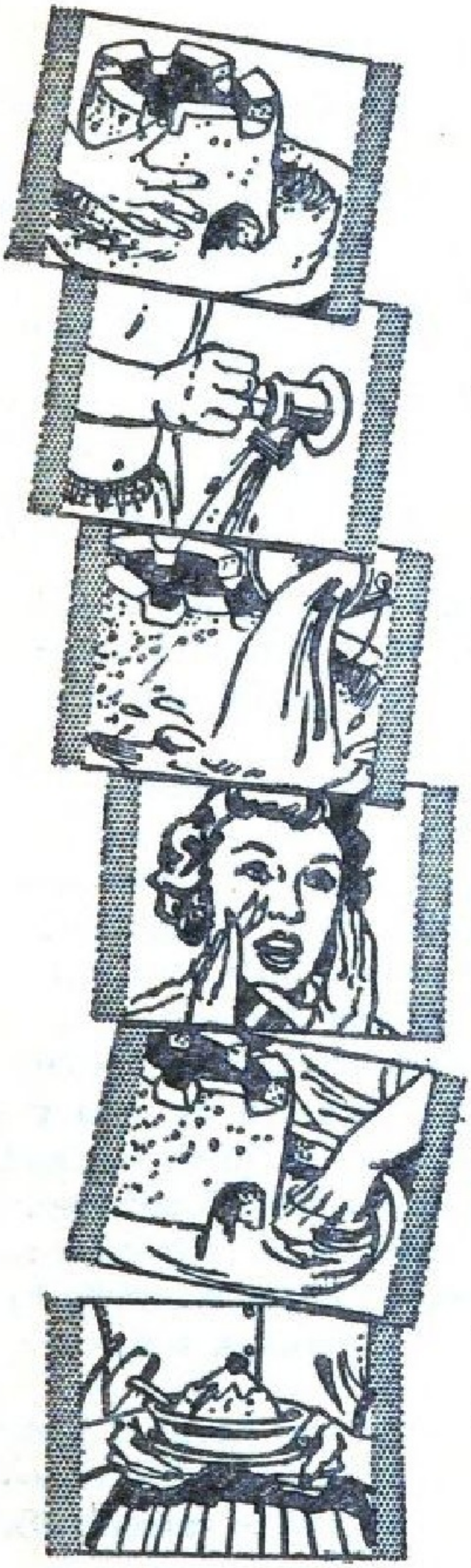
Now, let's assume that when you burst outdoors through that screen door, you promptly spied one of the youngsters playing in a sandbox.

There's a swell target. Your camera's all ready to go. What will you actually shoot with it?

The chances are—this being your first venture at moviemaking—you may not make an honest-to-goodness movie at all. You may simply take a position from which you can sight on the youngster—the sandbox, a good chunk of the lawn—and then make one long and leisurely shot lasting maybe 10 or 12 seconds. It'll be clear and colorful. But it isn't a movie!

See if you don't agree that something like the following would be a whale of a lot more enjoyable to see:

what I've got a lot of
ning at the same time !
a sight - and - shoot method .
page 29 !
creen door !)
a sandbox .
may simply take a position
lasting maybe 10 or 12



Small and pudgy hand pats side of sand castle.

Youngster's feet climb out of sandbox . . . pad across lawn.

His hand turns on outside faucet.

Water from faucet pours into sand bucket resting on the ground.

Feet back at sandbox as they climb in.

Close-up expression of youngster's grimly concentrating face.

Water pouring into castle "moat."

General view of busy boy in sandbox.

Mother's feet, as they step outdoors onto lawn.

Mother's face, as she calls boy to lunch.

Pudgy hand pauses in its happy splashing in the sand and water . . . then continues.

Mother calls again.

Hand continues to puddle water and sand.

Mother's feet entering house door.

Boy's hand, still at play.

Mother's feet again coming outdoors. Camera slowly panorams up to hand level to show dish of ice cream . . . then up to her face as she raises one hand to her mouth and her lips phrase the special treat.

Boy's hand abruptly stops play.

Boy's head spins around toward camera.

Boy's feet, as they step out of sandbox and hurry away.

Mother waiting for boy with dish and outspread towel. She scoops him into her arms as he runs up to her.

With the boy now happily clutching his treat, Mother carries him indoors.

Now *that's* quite a bit different, isn't it? *That's* the kind of story any movie camera can tell—and very easily, too.

Yet it would be unreasonable to expect you to shoot such a movie story every time you pick up your camera. But it does show what movies can do for almost any subject and situation.

You don't need a scenario to film home movies. You simply film things the way they happen, using a movie camera's unique ability to weave a series of shots—some long, some short; some made close up, some made from well back—into *one* picture, a *motion* picture, in which one scene leads out of, and then into, the next.

Home movies don't require any acting or any posing. People, young and old, aren't bothered by a movie camera that lets them go right on being themselves and doing what they are doing. But a little forethought, a few suggestions, can frequently be of help—such as the certainty that Mother would get quick results by "baiting" her last summons with, perhaps, a scoop of chocolate ice cream.

The right shooting distance is also born of good sense. Most shots in our little outline are close-ups—and you can really move in with movie cameras for close-up shooting! Why, for example, cover more than that colorful sand bucket, when the youngster fills it at the hose connection? What better way to show the reaction to Mother's, "I-c-e c-r-e-a-m!" than by a close-up of the boy's face, and then one of his hurrying feet?

what movies can do for

bility to weave a series of
ch one scene leads out of , and

n go right on being themselves
at Mother would get quick

e in with movie cameras for
nection ? What better way to
feet ?

gh for it to register , in
nany seconds of camera

oon as you've decided ,

The timing of shots is also based on plain logic. Take that shot of the boy's face again. You'd want it on the screen only long enough for it to register, in effect, a quick "Wow!" But when Mother scoops up the youngster and towels off his face and hands, this obviously deserves many seconds of camera attention.

It's certainly a lot more fun to *show* little movie stories like this. And it's a lot more fun to *shoot* them, too—as you'll find out as soon as you've decided, unless you already have, which movie camera is the right one for you.

you showed in selecting your
ıovies , but have yet to take
and movie film are "

for its popularity — is about
ively costly still cameras , or
s lie in either their increased
And even advanced movie

CHAPTER 2

▶ *Choosing the Movie Camera That's Right for You*

IF YOU are one of the many who have recently started to make movies, this chapter will probably confirm the good judgment you showed in selecting your camera. If, on the other hand, you are one of those who have thought how much fun it would be to shoot and show personal movies, but have yet to take the plunge, we'd like to ask you one question before answering yours.

Have you held back because you think movie cameras and movie film are "expensive"?

Quite the opposite is true! The price of the most popular movie camera on the market today—and price is not the only reason for its popularity—is about thirty dollars. There are, of course, movie cameras costing more—just as there are inexpensive, medium-priced, and relatively costly still cameras, or almost any other product you can name. The virtues of the somewhat more costly (which is hardly the word!) movie cameras lie in either their increased range or their promise of greater filming ease. Yet, as you will see, even the simplest movie camera is remarkably talented. And even advanced movie effects are truly simple to make.

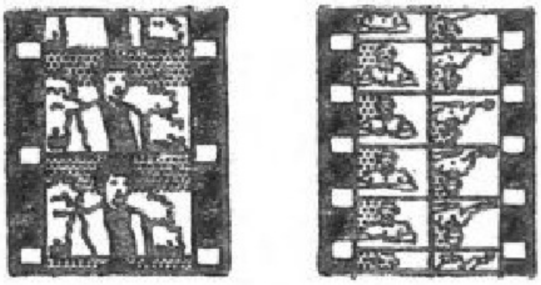
▶ *Size is the factor that decides cost*

Movie cameras, and movie film, differ chiefly on the count of size—not necessarily their over-all size, but the

ith amazing color and

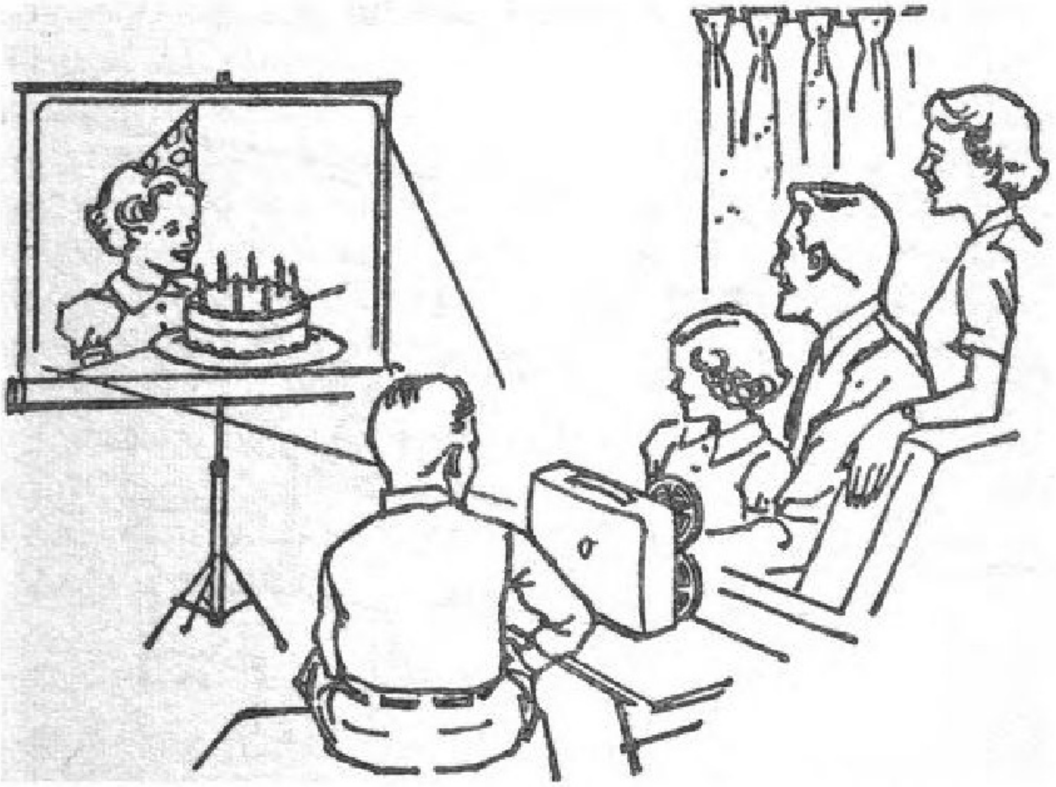
ch picture on it . This ,
undant detail onto

size of the images on their film. This, in turn, decides the size to which they can be projected on the screen.



These are the actual sizes of 8mm and 16mm movie frames. Even though they're tiny, they can be projected to large screen sizes with amazing color and clarity.

Most movie cameras use 8mm film. Because this film is actually a film ribbon 8 millimeters wide, it determines the width of each picture on it. This, admittedly, is pretty small—about the size of the nail on your little finger. Yet, these minute color images can be projected with abundant detail onto screens three, four, or even five feet wide—plenty big enough for living-room



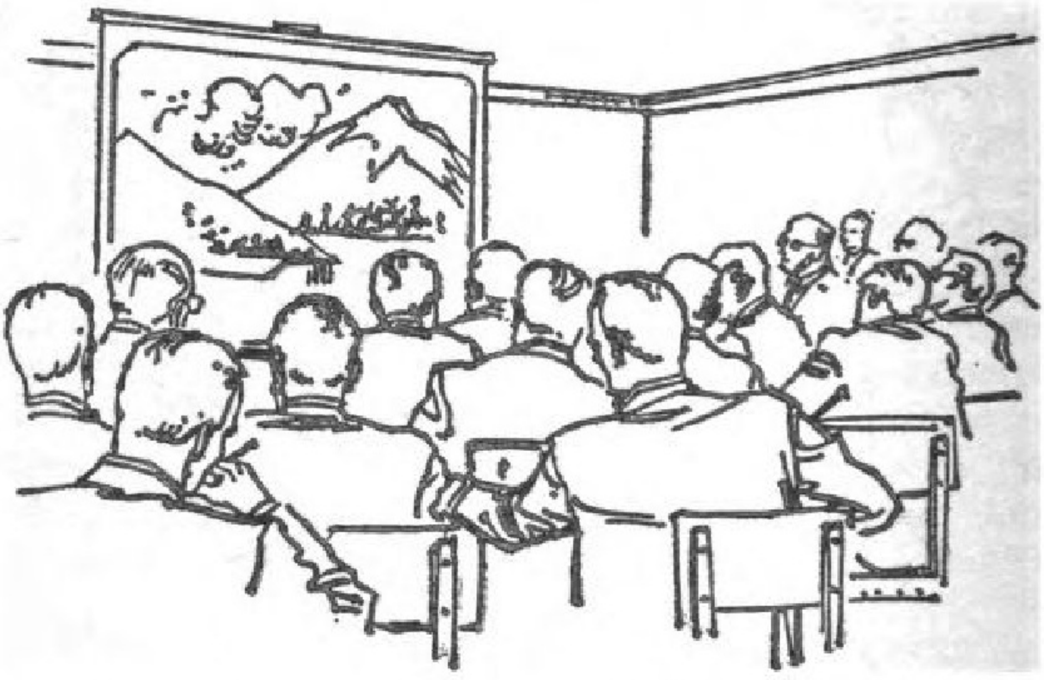
For home showings, 8mm movies are plenty large enough.

shows. The small size of the film is one big reason for its low cost. Another reason is that the film you shoot is the film you show. No prints are needed. The pictures you take with your camera are developed by laboratories, on the same length of film, into the pictures you project—and at an average total cost of only ten cents per full-color movie scene!

And note the expression "full-color." Because color movies have become so easy and so inexpensive, hardly any moviemakers use black-and-white films any more!

▶ *Size—again the factor*

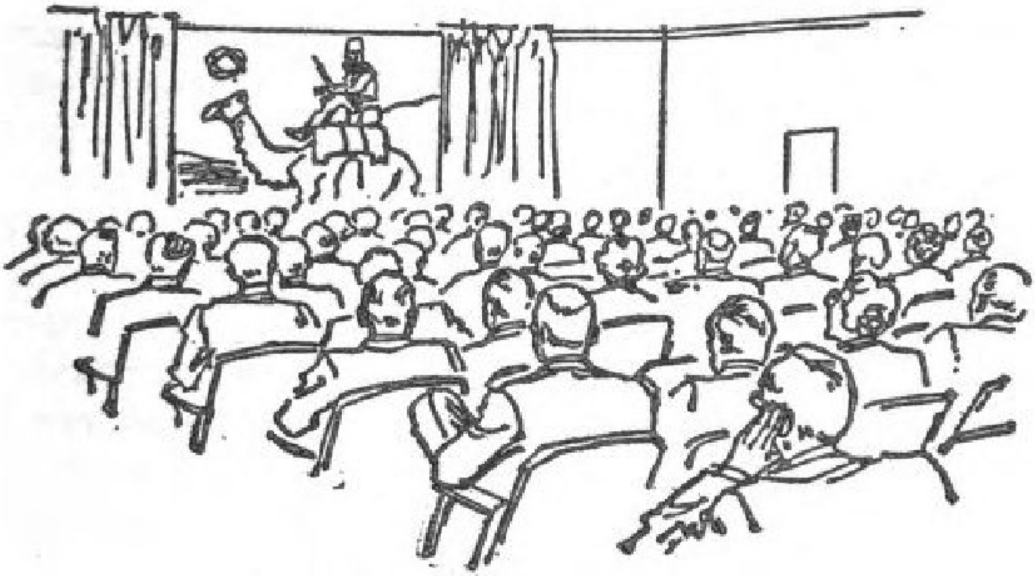
Size is also the reason why some moviemakers prefer 16mm film and the equipment that accepts it. Being twice as wide as 8mm, images on 16mm film can be projected to twice the width possible with 8 mm. On screens up to 10 feet in width, or even larger, this size difference is a very needful advantage to those who, even occasionally, show their movies before large groups in halls or auditoriums. This may help to explain why you've perhaps heard that 16mm movies are "better" than those made on 8mm film. But this doesn't



Showing your films before groups stretches the limits of 8mm movies and suggests the use of 16mm film and equipment.

v . No prints are needed .
ct - and at an average total
rs use black - and - white
ı , images on 16mm film
s a very needful advantage
you've perhaps heard that

گوشتی



For large groups, 16mm film is a must.

hold. When both types of film are magnified proportionately, and viewed from a proportionate distance, results can be identical. But they do differ in cost. Being larger and requiring more film for the same number of pictures, 16mm film naturally costs somewhat more.

So, as a rule, does the 16mm camera. Again not because it is necessarily better than an 8mm camera, but because camera manufacturers know that the moviemaker who will project his films to professional or semiprofessional sizes before larger audiences will probably be interested in a camera built to produce professional or semiprofessional effects, such as fades, or slow-motion movies—neither of which is regarded, by many moviemakers, as absolutely essential to family film records.

In short, *there is no one best movie camera!* But, surely, among the many cameras available nowadays, there is one just right for you.

Let's look for it!

▶ *The yardstick to camera choice*

Other than the size film they use, and the size of the screen pictures they produce, movie cameras vary on about a half dozen other counts. Here are four very

. But they do differ in
acturers know that the
ested in a camera built to
moviemakers , as
you .
counts . Here are four

important factors for you to consider when you choose your movie camera:

1. Exposure guide—or built-in meter?
2. Roll-loading—or magazine-loading?
3. A fast lens—or an extra-fast one?
4. Focus—or no focus?

First, there's the question of choosing a camera with or without a built-in exposure meter. And, if the answer indicates the latter, then you must decide whether with manual or automatic meter-and-lens control. Therefore, although the topic of exposure will be thoroughly discussed in an early chapter in this book, we'll pause here to deal with it briefly.

▶ *Exposure guide—or exposure meter?*

You have your choice of cameras with lenses that are set by the advice of the camera's printed exposure guide, or by the readings of the camera's built-in exposure meter, or of cameras with lenses that are automatically set by the meter itself.

The chief advantage of the first is price. The simplest type of camera in respect to exposure estimation, it can therefore be the most inexpensive. This doesn't mean that it sacrifices all movie ease and certainty to economy! A "meterless" camera will take just as good movies as will those with meters. The latter simply make the factor of exposure supremely easy.

▶ *The fundamentals of movie exposure*

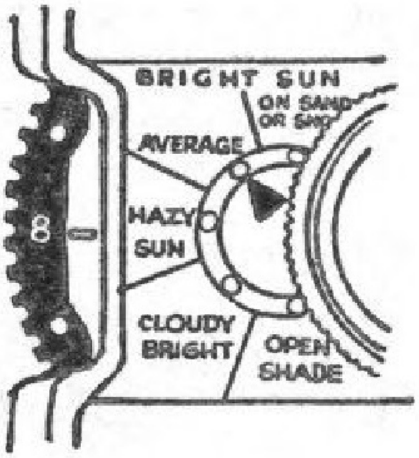
Many people who haven't made movies are inclined to believe that movie-film exposure must be somewhat difficult for the very reason that movies and not snapshots are the objective. If anything, the contrary is true. For proper exposure, with any type of camera, is simply a matter of letting the right amount of light reach the film through the camera's lens and shutter—the first of which decides *how large* an opening is

ıcus - or no focus ?
ıtter , then you must decide
iscussed in an early chapter in
ngs of the camera's built - in
ıe most inexpensive . This
ıs will those with meters .
ery reason that movies and
matter of letting the right

used, and the second *how long a look* is taken through that opening. The more advanced still cameras, as you know, come with a variety of shutter speeds that enable them to blink off glimpses of moderate, fast, or extra-fast action, and frequently freeze it in its tracks. Yet, slow-shuttered elementary snapshot cameras, which can't stop action, and *all* movie cameras, which want to record action rather than stop it, share one exposure simplification. Their shutter speeds are fixed, unchanging, unnecessary to consider. Exposure duration is no factor. The only problem is the "size" of the "look"—if you'll permit the term.

variety of shutter speeds
uttered elementary
osure simplification .
size " of the " look " -if

▶ *The exposure-guide method*



Point the arrow on this camera's exposure guide to the kind of light that prevails, and you've automatically set the lens!

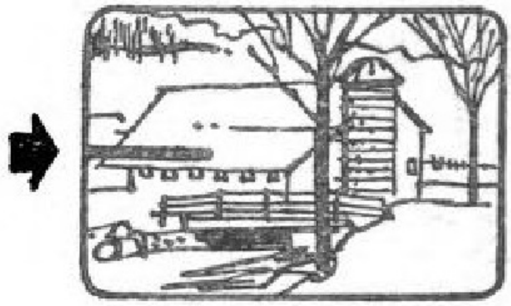
Determining correct exposure is no chore at all with even the simplest movie camera. Printed, as a rule, right by the lens are brief yet adequate descriptions of a variety of light conditions, such as "Bright Sun," "Hazy Sun," etc. For these conditions, there are lens-opening numbers of, among others, 8 and 5.6. For a bright, sunny day the guide indicates the lens setting of 8. Set it to that number—and that's just about all there is to making movies of everything under the sun. In fact, on many "meterless" cameras you simply point a lens-coupled indicator to the description of the exist-

f yet adequate
ng numbers of , among
ere is to making movies
f the exist-

ing light condition, and, at the same time, you've set the lens. This, you'll agree, hardly sounds difficult. And although moviemaking indoors is the topic of a later chapter, we want to state here that indoor movies are even easier to shoot than outdoor movies.

Admittedly, there are two shortcomings to making movies without a meter, both of which have to do with the human element in picturemaking, and not with the camera. One is the tendency of some picturemakers, who have no trouble telling a sunny day from a hazy one, to forget to make lens adjustments, when necessary, for their differences. The other is the desire of some who, although enjoying the shooting and showing of movies, prefer to have as little concern for their success as possible. For these two groups, there are the somewhat more expensive cameras with built-in photoelectric exposure meters that measure the light-reflecting qualities of targets and then either tell you where to set the lens or set it for you.

▶ *The exposure-meter method*



Some cameras have built-in exposure meters. When the needle in the viewfinder is in the middle of the picture, exposure will be correct. If it isn't, you turn a dial which moves the needle—and automatically sets the lens at the same time.

We will use as our example the most popular model in its field, a type of metered camera that has a meter-activated needle that appears right before the miniature picture you see when you sight a subject through the viewfinder. The needle is also connected to the camera's lens. If the needle is at about the center of the

emaking indoors is the topic
n picturemaking , and not
;et to make lens adjustments ,
ıovies , prefer to have as
· in photo- electric exposure
ll be correct . If it isn't , you
ıt appears right before the
. If the needle is at about the

finder image, vertically, you're set to shoot. If it isn't, you simply turn a knob on the side of the camera, in one direction or the other, until the needle *is* near mid-center. This, at the same time, adjusts the camera's lens to the right-sized opening. Pretty hard to forget to adjust the lens—if it's necessary—when there's always a needle before the target to remind you! But you *do* have to make any needed adjustments so as to follow the advice of the meter.

With the completely integrated meter-and-lens movie camera, all you have to do is sight and shoot. The meter not only measures the light but also opens and closes the camera's lens as it does so. Swing from sun to shade, and the meter will open up the lens as you do it. You *can't* forget to change the lens for changes in brightness!

Offhand, this would seem like the ideal camera for everyone. But, for one thing, it costs somewhat more than a camera without a meter—and, if camera economy determines whether or not you adopt moviemaking, be assured that a meter is one of the conveniences and not one of the essentials of successful moviemaking.

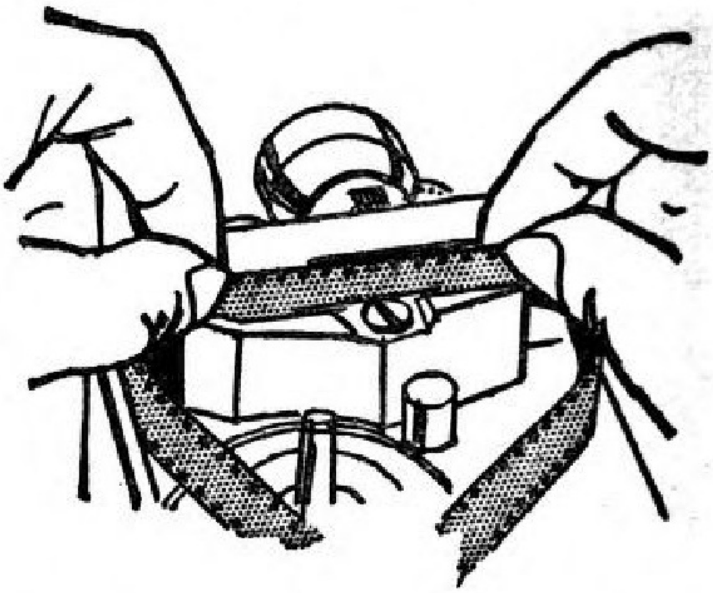
Let's just understand, here, that moviemaking is not a science. It's a very simple, a very personal thing. No two of us make movies of exactly the same subjects or in exactly the same way. We film what we like, and, by and large, the way we like to film it.

And today, good movie results are largely assured!

► *Roll-loading—or magazine-loading?*

This is pretty much like asking you whether you want an auto with windows that you wind up and down by hand or one with windows that operate by electric motor. For, while it's easy enough to load any movie camera, it's super-easy to pop film into a magazine camera because the film is already loaded in the magazine. All you do is open the camera cover and drop in the film. You can also switch from one type of

ther , until the needle is
lens - if it's necessary -
advice of the meter .
s the light but also opens
rget to change the lens for
meter - and , if camera
the essentials of
es of exactly the same
ws that operate by elec-
the film is already loaded



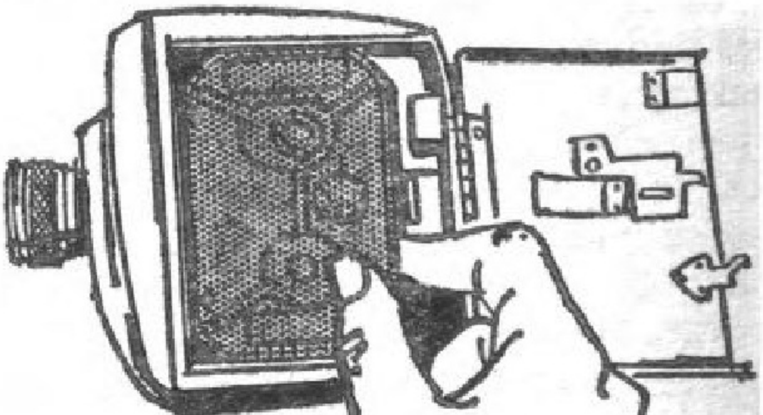
Loading a movie camera is as easy as loading a snapshot camera.

ghtly higher than that in rolls

see ? Under average light ,

magazine film to another any time you want to, whether the film is wholly or just partly exposed.

The difference here is again largely one of convenience and, to a degree, cost. For film in preloaded magazines is priced slightly higher than that in rolls.



Loading a magazine camera is as simple as dropping your hat on the closet shelf and closing the door!

▶ *A fast lens—or an extra-fast one?*

There's also the choice of lens speed—which means, quite simply, with how little light do you want your camera to be able to see? Under average light, one camera lens can see as well as another—and, by

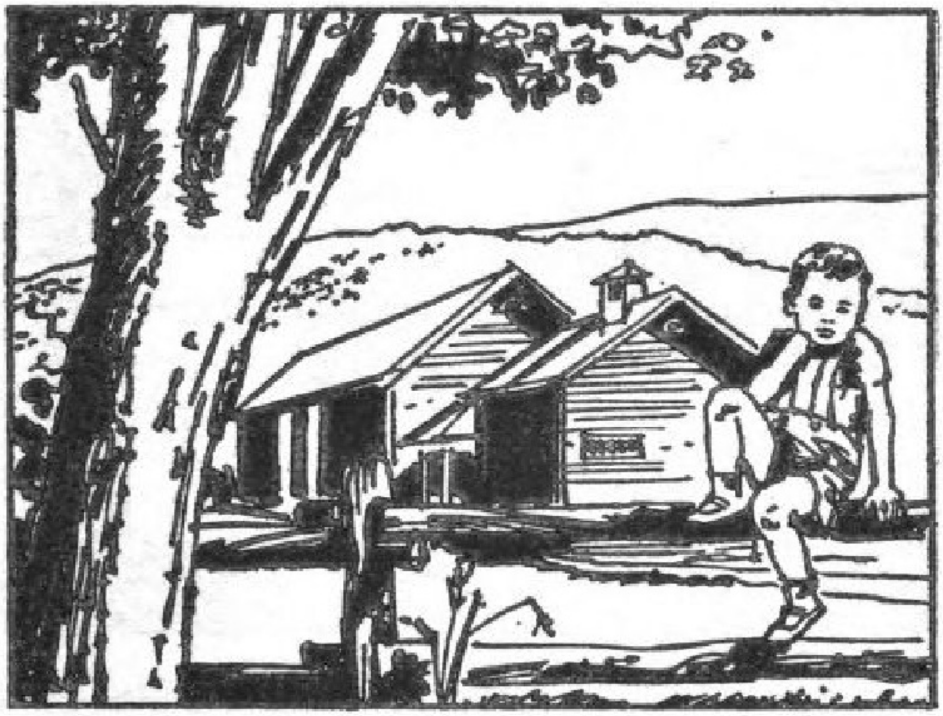
ıot just dim , but very dim .
ɔ dusk and on days that are
ıs .

o to the latter because it is
ly makes it seem a very
ens . You can focus it to

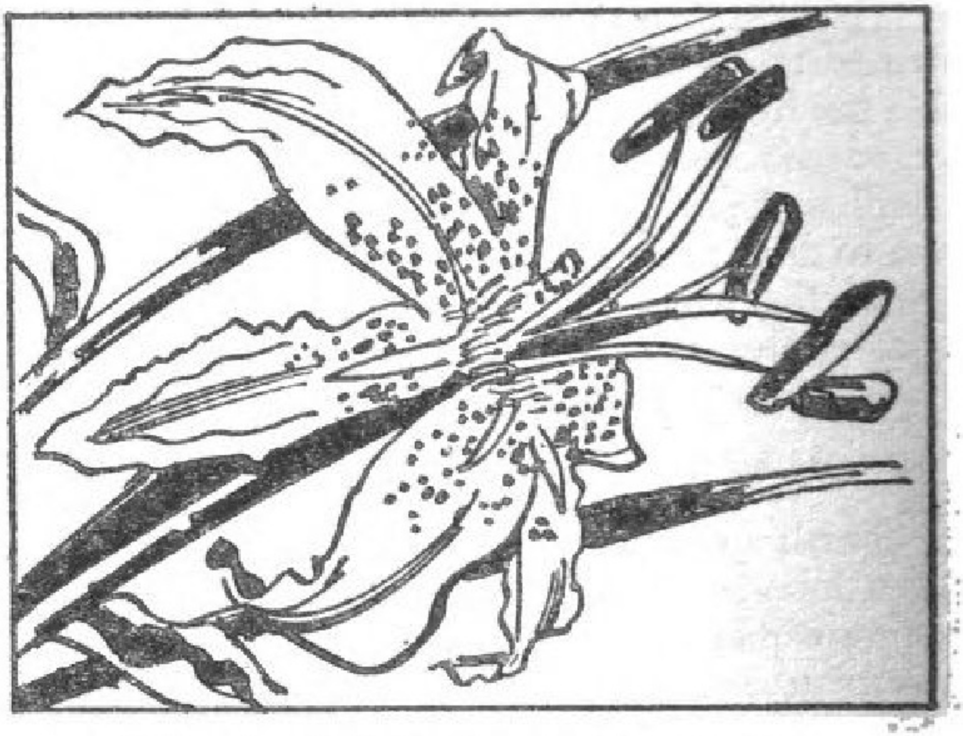
"average light," we mean anything from bright right on down to fairly dim. The extra-fast lens has the edge when the light is not just dim, but very dim. There are no modern movie cameras with really "slow" lenses, as all will make beautiful color pictures outdoors from dawn to dusk and on days that are overcast, as well as on those that are sunny. They will make indoor movies just as easily with the aid of inexpensive photofloods.

▶ Focus—or no focus?

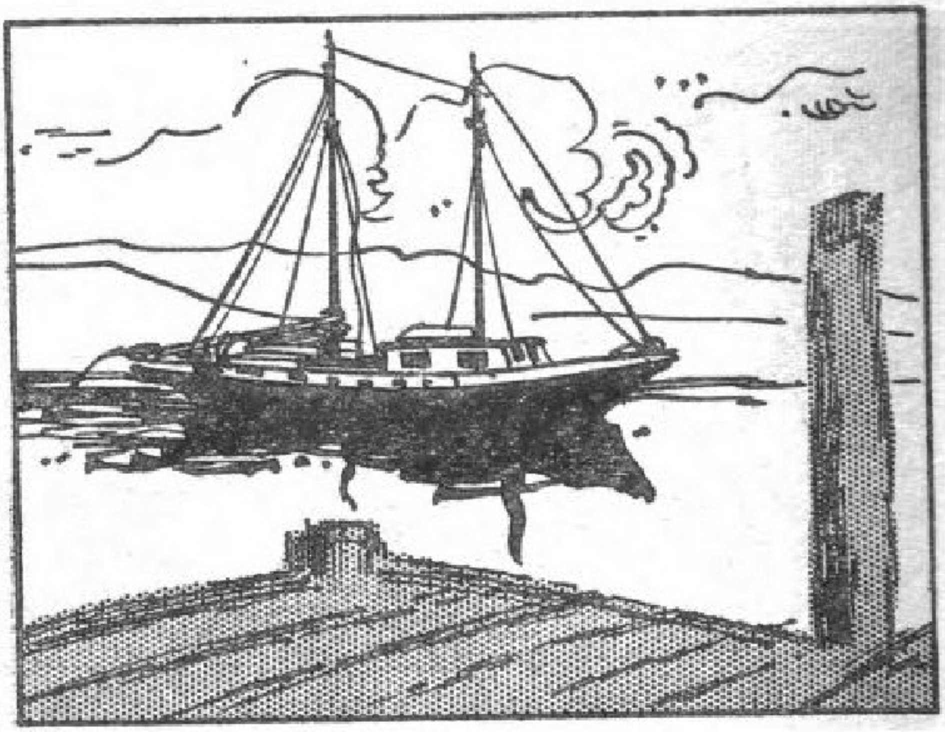
The fourth question is whether you want a camera with a focusing lens or with one that doesn't focus. Your vote may very well go to the latter because it is prefocused for sharp results with all targets, from those at a distance of a few feet to those clear out at the horizon. This probably makes it seem a very satisfactory lens indeed—and it is. So can be the focusing lens, which you can *set* to the uniform simplicity of a fixed-focus lens. You can focus it to produce crisp re-



With a fixed-focus lens, everything is sharp from a few feet away to as far as you can see.



With a focusing lens you can move in really close.



With a focusing lens you can sight in on your main subject and soften up the detail in other subjects, like this dock in the foreground.

(Continued on page 45)

e them to get the most fun

Movies are the cat's meaow! The pictures in this book will give you some suggestions about what pictures to take and how to take them to get the most fun from your movies.

s (or anyone else) are made
elephoto lens is helpful for

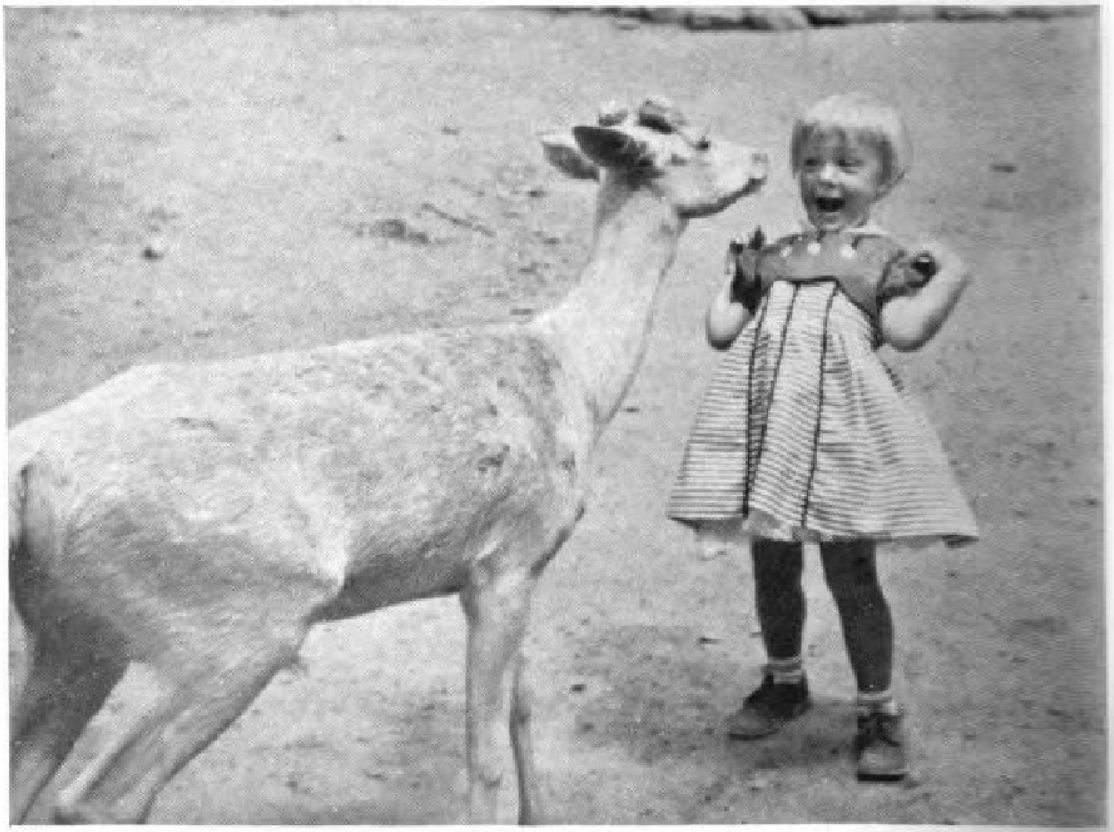
KIDS, KIDS, KIDS

More movie footage is probably shot of children than of any other single subject. The best pictures of kids (or anyone else) are made when they are being themselves, having spontaneous fun. Always have your movie subjects *doing* something. Shooting tip: a telephoto lens is helpful for catching these happy slices of action unobserved.

family and friends . Your
- color , live - action

BACK YARD HIGHLIGHTS

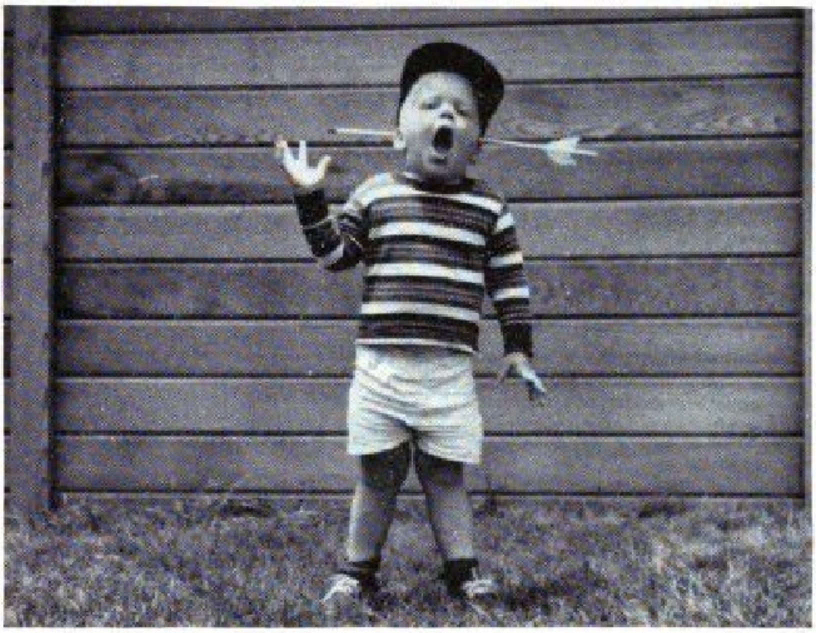
How far do you have to go to find colorful, entertaining movie subjects? No further than your own back yard. The stars? Your family and friends. Your story? All the things people do being themselves. Total shooting budget? A few dollars for film and processing. Result? Full-color, live-action pictures of the wonderful times you've had.



show people doing the things

NO POSES, PLEASE!

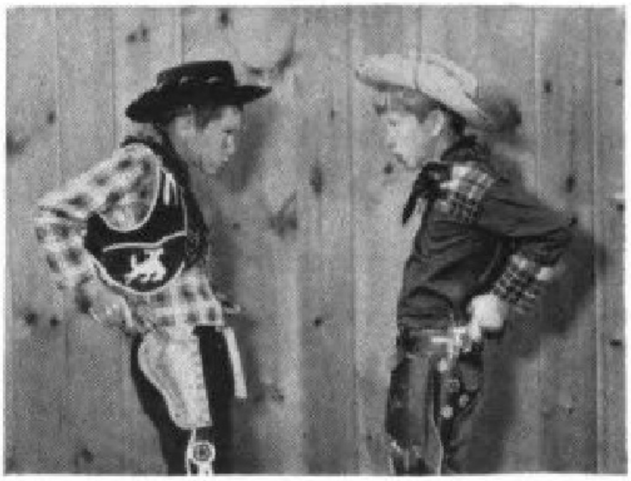
Stiff, awkward poses are strictly for cigar-store Indians. As we'll say over and over again, movies *move!* The best movies show people doing the things they really do, not fidgeting nervously when they see the lens pointed their way.

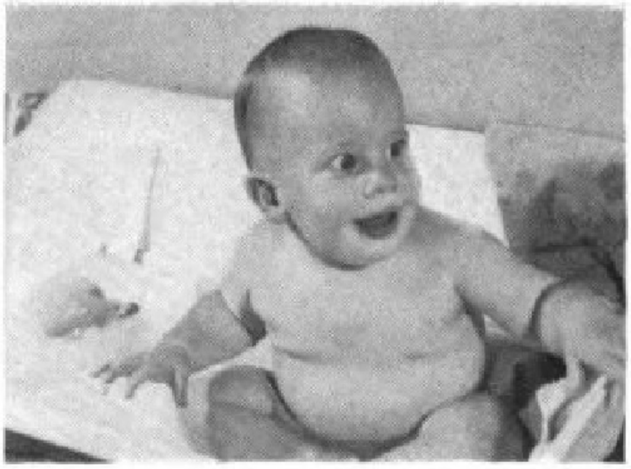


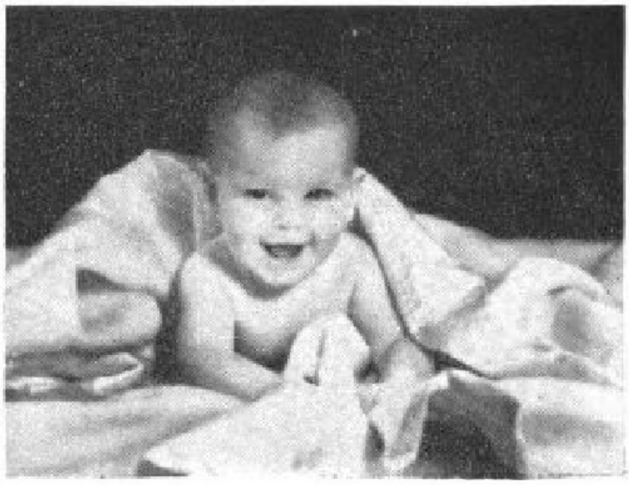
ly . Always have your

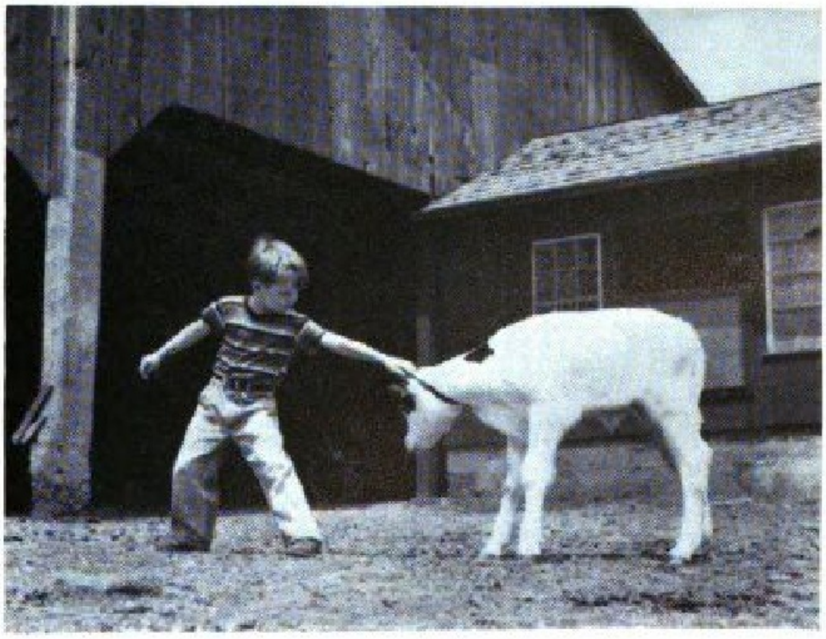
DRAW, PARDNER!

Or do *something!* Pictures of starchy, clean youngsters standing stiffly in front of the house are as unnatural as snowballs in July. Always have your subjects, adults and kids alike, doing something.









(See Chapter 6 for the

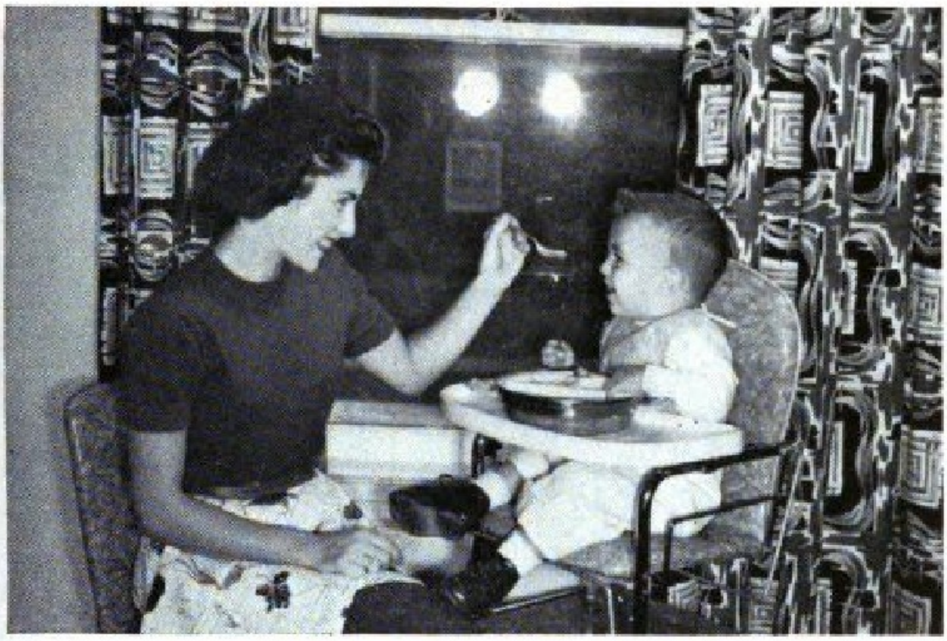
FUN UNDER THE LIGHTS

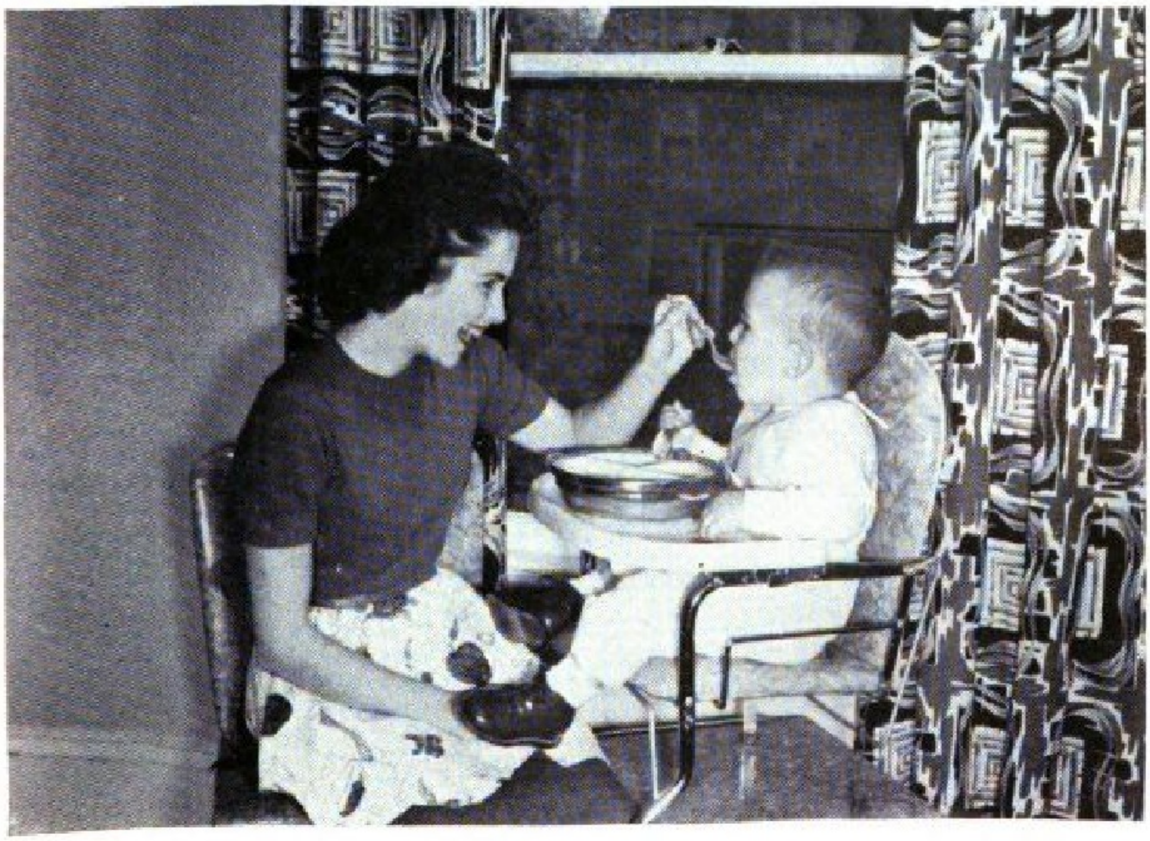
The lights here are reflector-type photofloods in your movie light bar. Pictures like this are as easy to take as spending money. (See Chapter 6 for the details.)

around to one side so

WATCH FOR REFLECTIONS

When your movie lights are aimed straight at any shiny surface, such as a window or mirror, reflections will spoil the picture. Step around to one side so the light bounces away from the camera lens. Make sure you can't see your own image or the lights through the viewfinder.





urch , the shower of rice , the

STARRING THE BRIDE

Weddings are a sentimental favorite for home movies. You know what's going to happen—the nervous groom waiting at the church, the shower of rice, the reception, throwing the bouquet—so it's not hard at all to make a complete movie story of the proceedings.

(Continued from page 32)

sults of objects only inches, instead of feet, from the camera or pinpoint its focus on the most important object and its distance, thus throwing somewhat out of focus and out of attention all other objects at all other distances. There's also, and understandably, a difference in cost between the two types of lenses.

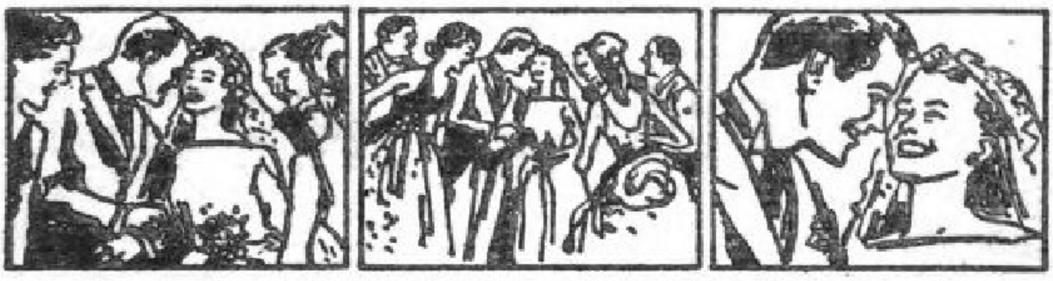
▶ One lens—or a choice?

There's also the matter of how many lenses you'd like to be able to shoot with. Do you want just one good one, for average movie shooting, outdoors and in? Or would you also like to make an occasional telephoto or wide-angle shot—if it's really easy and not too expensive to do?

Before you decide this, you'll naturally want to know something of the advantages of these effects—and here they are, in brief.

A movie camera's standard lens results in a normal viewpoint, that is, normal magnification of subjects, as shot and shown. Sometimes, however, and especially outdoors, subject interest may be concentrated on small or distant objectives—and here a telephoto can reach out to pull them in. At other times, especially indoors, the problem can be more one of backing up with your camera so as to "get everything in" as, frequently, you just can't back up very far indoors. Here the broad viewpoint of a wide-angle lens will span a greater area than will a standard lens.

IF YOU HAD TO MAKE YOUR MOVIES FROM A FIXED POSITION—



A. A standard lens would cover a field about this wide ...

B. A wide-angle lens would span a much wider area ...

C. ... and a telephoto lens would give you a close-up from well back.

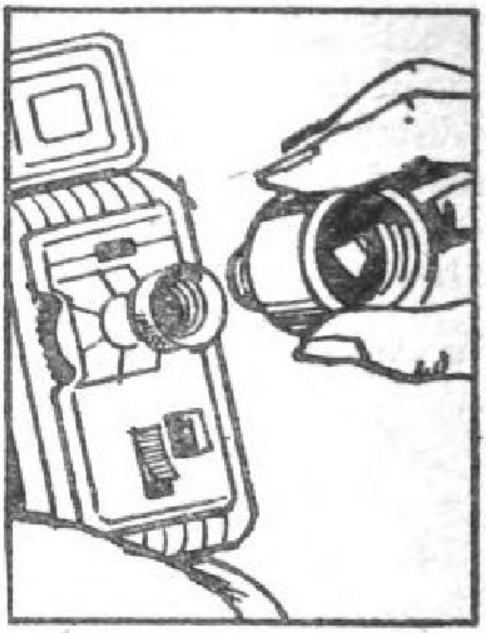
hus throwing somewhat
etween the two types of

e shooting, outdoors and
?

netimes, however, and
pull them in. At other
ently, you just can't back

ecourse is a slip - on
- angle . Other cameras turn
'pe of camera - where again

ıtaining extra sockets
ature , such cameras usually
ıpler type of turret camera
cover the standard lens and



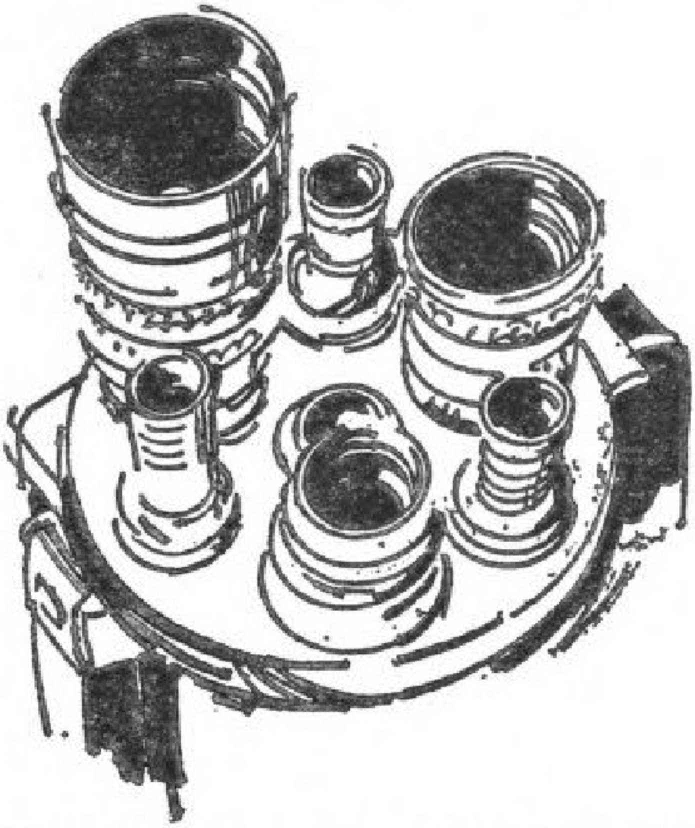
Even one-lens cameras can make wide-angle or telephoto movies with the help of an inexpensive conversion lens.

You've a choice of avenues to lens versatility. With some cameras, to which standard lenses are permanently affixed, your recourse is a slip-on conversion lens. This, as its name implies, changes the viewpoint of the standard lens to that of a modified telephoto or wide-angle. Other cameras turn the trick by the temporary substitution of a completely independent telephoto or wide-angle lens. There is also the turret type of camera—where again you've a choice.

One style of turret camera comes fitted, as a rule, with a top-quality, focusing, standard lens seated in a revolving turret containing extra sockets accepting your choice of any one or two additional lenses of varying degrees of magnification. Going whole hog on this one feature, such cameras usually include many other filming refinements as well and are therefore, frequently, advanced-type equipment. There is also the simpler type of turret camera which comes with a perfectly good standard lens, plus one or more turret-mounted conversion lenses which can be rotated to cover the standard lens and convert its view for modified telephoto or wide-angle effects. A happy combination of extra range—at little extra cost!

ıormal pace . Other
ıeing the outstanding
ex- posure button - nice to

ıple , snapshot economical ,
: of movie range at little
ıal screen , but for far less

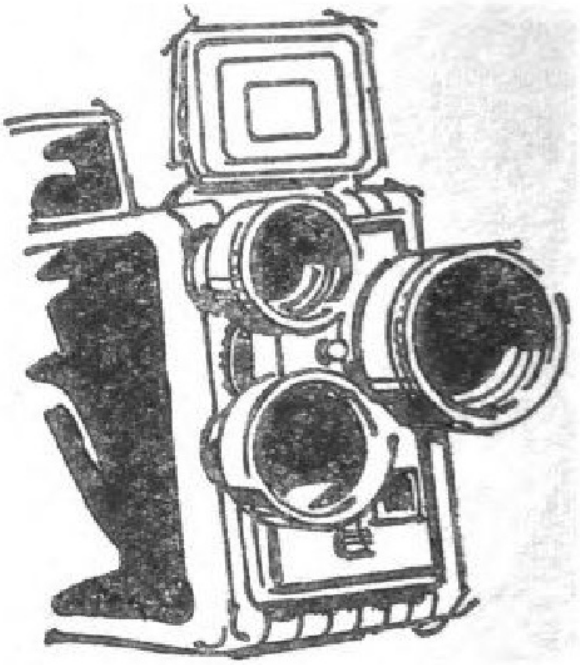


For complete lens versatility—a turret camera fully equipped with lenses and their individual viewfinders.

And there's a choice of still other camera features. Some cameras shoot at standard speed only, which reproduces action at its normal pace. Other cameras can be set to shoot at faster or slower speeds—with slow-motion filming, so useful for slowing down sports action, being the outstanding example. Some cameras, too, incorporate a single-frame control for exposing only one frame of film every time you touch the exposure button—nice to have if you expect to make animated movies or special title effects.

Your movie camera, as you can see, can be whatever you want it to be, do whatever you want it to do. It can be snapshot simple, snapshot economical, yet completely adequate for the building of a family movie diary. Or it can still be that simple and yet bring you a greater degree of movie range at little added cost. It can also be one of the advanced models that will capture just about any of the effects you've seen on the professional screen, but for far less than the cost of professional equipment.

r . In fact , there are four essen-
ıter chapter on movie shows .
.ve " in the light of the hours
vie camera , you hope it won't



A happy and popular medium—an inexpensive turret camera with one true lens and two conversion lenses.

▶ *Moviemaking's four essentials*

Showing movies is certainly every bit as important as shooting them. To show good movies you need a good movie projector. In fact, there are four essentials to movie enjoyment—camera, film, projector and screen—and we'll have more to say about the two latter items in a later chapter on movie shows. Yet, as it's possible to buy all four today for less than one hundred dollars, a movie outfit surely cannot be called "expensive" in the light of the hours and years of unique pleasure it provides. For it's true that life will seldom stand still for you, or for a camera. And for a movie camera, you hope it won't!

ason is to keep a growing -
such events to relive over

ıple , and , sometimes , a
cially in telephoto shots
flowers hold the
:n .

: and places , events , and

ways running - and they

CHAPTER
3

Telling the Movie Story

WE DON'T KNOW just why you've bought—or are planning to buy—your movie camera. But we can guess.

The most likely reason is to keep a growing-up diary of children—as only a movie camera can "write" it.

Or maybe a holiday or vacation trip is the reason . . . so you can save such events to relive over and over again.

It's even possible you've a special interest to which only movies can do photographic justice. Sports activities are a good example, and, sometimes, a fondness for wildlife prompts the camera purchase. Movies of the graceful action and amusing antics of birds and animals, especially in telephoto shots that let you pull targets in close while you keep your distance, play a large part in many an amateur film library. At other times, flowers hold the projector's spotlight . . . a series of blossoms, only an inch or two wide in the garden, but many feet wide on a living-room screen.

Any one of these is reason enough for moviemaking. Frequently, the family movie camera records them all, for all are of people and places, events, and things we want to remember just as they were.

Most subjects "write" their own movie script

Take for example, the youngster and his dog we mentioned at the very outset of this book. They were running. They're almost always running—and they can

run in movies. But there's usually more to a movie opportunity than this. The boy and his dog are on what is to them very serious business. Maybe the pup knows of a rabbit hole. He's dug in it before, and he's about to dig in it again, while the boy, down on all fours, watches and encourages him. Before long, not being a habitual digger of rabbits himself, the boy loses interest and throws himself on his back to chew meditatively on a blade of grass. He has it—he'll build a fort!

Pursued by the pup, off he pelts to the house to enlist his father's aid in a search for old boards and cartons and hammer and nails, all of which are loaded into an express wagon and lugged away. Important stuff, this fort building—and his face shows it. The pup, however, obviously thinks it a profitless pursuit and soon goes off to bedevil that rabbit, which has probably long since decamped via another entrance to the burrow. Meanwhile, the fort rises by steady, if irregular, stages to finally stand complete in all its off-plumb glory. It has to have a name—and the boy, with his nose almost as close to the board as the brush he uses, painstakingly letters it out and hammers it into position. Then, proudly if not perpendicularly, the flag is run up as Dad, recruited for the occasion, stands severely at attention.

What a movie of a boy *that* would make! Just the

us business . Maybe the pup
encourages him . Before
on a blade of grass . He has
ails , all of which are loaded
sly thinks it a profitless
Meanwhile , the fort rises by
ose almost as close to the
flag is run up as Dad ,

way it happened, in a series of shots, some made from well back, some from within inches, some as long as it took to raise the flag and secure it, some as quick as the dipping of a brush in a paint can.

A movie can be a far simpler or far more elaborate thing, too.

It can be as simple as the minute Mother stole from her housework to tend to her bird-feeding station. She was polishing the inside of the living-room window when she first looked out to see the chickadees and juncos hopping futilely about. When she came out the side door with the seed and suet, most of the birds flew only a few feet away to stop and watch. One just flicked up on top of the feeding station, and from there to her hand, even before she could fix the suet to its peg. The job done, she stepped back, and several more fluttered to the feast. By the time she had picked up her polishing cloth and looked out the window again, they were all back—and you could see this made her happy.

There's a movie, too—in less than a dozen shots!

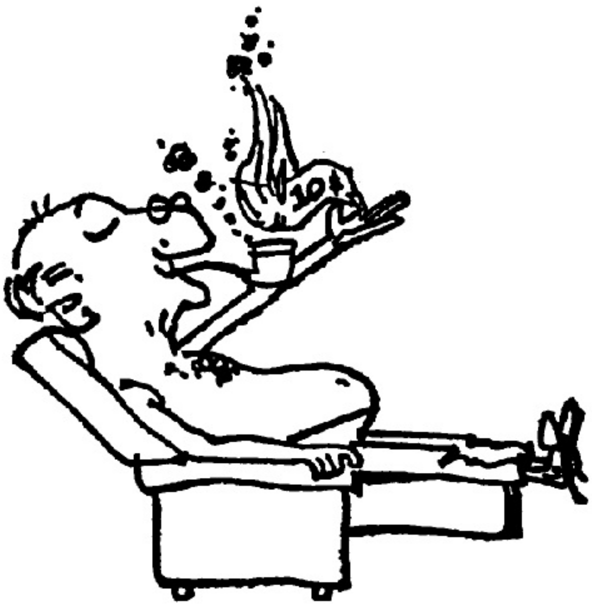
You can make one in a half dozen—of Granddad, perhaps, taking out his pipe, tapping it on the heel of his shoe, tamping it full from his pouch, putting a match to it and puffing strongly before leaning back contentedly in his chair. This will mean not just one glimpse of him, but six, each made from a different

flag and secure it , some

side of the living - room
ith the seed and suet , most
hand , even before she
d up her polishing cloth and

, tapping it on the heel of
This will mean not just one

the match ; for ten seconds ,
ving and completely lifelike
movie in itself , and a
travel there , and there are
ing to be held up for size ,
he milkman . Route signs will
museum or historical site



angle and distance, and each of different duration. For seven seconds, show him filling his pipe; for three seconds, striking the match; for ten seconds, puffing his pipe to proper burning and settling into his chair. Then, in a matter of seconds—maybe thirty in all—you have a moving and completely lifelike picture sequence.

That's the essence of movies—*the sequence.* Not one subject, one shot—but one subject, one sequence, each forming a little movie in itself, and a collection of them telling a complete movie story.

Something more "elaborate"? That could very well be a movie of a vacation trip.

▶ *Making a family "feature film"*

Vacations don't often come upon you unawares. You plan and pack for them. They don't start abruptly at the vacation site. You travel there, and there are usually many interesting things to see along the way. Even before you start there are maps or folders to study, holiday clothing to be held up for size, sports' gear to be stowed in the car trunk, tires to be checked, a house door to be locked, and maybe a note to be put out for the milkman. Route signs will tell your movie audiences the roads you traveled, stops for gas and whirring pump gauges help mark your progress and a local museum or historical site may provide an interesting

ia your movie screen .

to the vacation cottage again
tracted shot or two that will

n will be new and strange ,
se ! The favorite fishing lure
som you can't identify is an
rning swim . Close - ups ,
ve to back up with a camera
lly the sub-

interruption. By all means, shoot the signs and plaques, for they'll title your reel for those who'll later make the trip with you via your movie screen.

Then you are there! If you're too travel-weary to get this moment on film at the time, it'll be no job at all to wheel your car up to the vacation cottage again the next morning and to tote in a bag or two for the sake of your movie camera. Then let's really see the vacation setting in a protracted shot or two that will set the stage for your future holiday activities.

There's no need, here, to outline things from this point on. There will be endless sights to see and savor. Because many of them will be new and strange, they'll get close and critical examination and this, certainly, is the way to film them. Close up. For many subjects, stay up close! The favorite fishing lure, lifted out of a crowded and colorful tackle box and secured to a line, is part of any fishing sequence. A new and delicate blossom you can't identify is an important moment in a woodland hike. A tentative toe thrust into cold water adds both tempo and temperature to movies of a morning swim. Close-ups, almost always, can be the highlights of your films—and if we seem to harp on this, it's because of the ingrained habit we all have to back up with a camera before taking a picture. Worse than that—to back up, take the picture and then put the camera aside and move in to enjoy personally the subject we've held off at long arm's length when making pictures.

You just don't do this with a movie camera! You let it look at things just as you look at them. When you first spot something of interest at a distance, you pause. But it's just a pause, for then you step up as close as you can get to look at first this, then this, and then this. Which is exactly what you should do in movies. Pause—for an introductory shot. Then move in with your camera to get the kind of close-ups of which every movie camera is uniquely capable.

When you move on to another interest or activity, have your movie camera take your audience along as it films one of your group moving away from one site or into another. Don't, if you can avoid it, leave your audience down at the beach watching Dad as he holds up his catch and then—whammo!—transplant them without warning into the middle of a canoe race held several miles and perhaps a day away. At least show Dad carrying his fish through the kitchen door, and introduce the water sports with a shot or two of spectators trudging down to a shoreline and taking vantage points from which to watch the events which will follow.

So, as you can see, a family feature film, such as one about a vacation, can have a beginning that builds up to the excitement of the holiday doings and be a place-to-place and day-to-day report of them. It should also have an ending. There's no point in tracing your route home. This would be anticlimatic. The vacation movie should end at the vacation site. One very reasonable way to do it is simply to show your party, back in the car, slowly pulling away from the cottage, with new-found friends waving their farewells. Or, you can take advantage of nature's own and resplendent "curtain"—a gradually darkening sunset. We'll tell you how to film sunsets in a chapter to come, and surely there's no more beautiful finale to a day or a movie than a setting sun dropping slowly to the horizon, perhaps with a few friends or members of the family silhouetted in the foreground.

interest at a distance , you
exactly what you should do
vie camera is uniquely

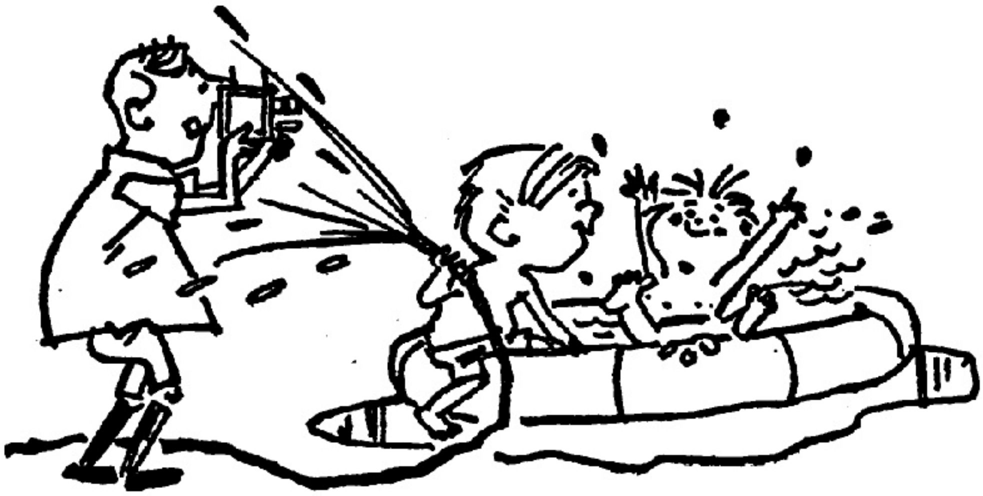
oup moving away from one
h and then - whammo ! -
d car- rying his fish through
ge points from which to

of the holiday doings and be
. This would be anticlimatic
the car , slowly pulling away
t " curtain " - a gradually
r a movie than a setting sun

›n them , some subjects tend
›r snapshot making . It
suggest that they don't pose
lirector , proposing a bit of

·y subjects are slow moving
hese in movies . Others zip
›ur camera turns its

► *No need to pose for movies*



All the movie opportunities we've mentioned in this chapter are of natural and typical action. Yet, when a camera is trained upon them, some subjects tend to become a little "unnatural"—to "freeze"—perhaps because, in the past, they had so frequently been asked to "Hold it!" for snapshot making. It doesn't do any harm to remind your movie subjects that there's no need to pose for a movie camera. In fact, it's a sound idea to suggest that they *don't* pose or in any other way evidence awareness of you and your camera. For, in a sense, you'll often want to be both cameraman and director, proposing a bit of perfectly normal action which your movie subjects will not only follow but actually appreciate!

► *Shoot it as you'd say it*

We spoke of tempo a while back. What's tempo? It's a way of giving pace to a story, any story, told in any medium. Some story subjects are slow moving and proceed with majestic calm—a pair of swans in a park lake or the sunset effect we just mentioned. You don't want to hurry these in movies. Others zip right along—such as your Little Leaguer and his pals at a nearby ball diamond. Here you shorten up the timing of your shots as your camera turns its attention from pitcher, to batter, to base runner, to batter, to fielder, to catcher, to the hysterical subs on the bench and the joyous fans in the stands. When action builds up to a climax, you can point it up by a series of quick shots to precede it.

How long, how short, should a shot be? Just as long or short as you think you'll want to look at it on your movie screen. Some people say ten seconds is a good average for a movie scene. But this is really a little too long. Count ten seconds to yourself right now. Quite a respectable chunk of time, isn't it? Yet, shots can be too short, too. A good average, we'd say, is seven to eight seconds—with ten to twelve seconds for leisurely or wide-expanse subjects and five, four or even three seconds for occasional quick glimpses that pace and punctuate a story. The point here is that, to be most interesting, a movie story, just as a written story, should not be told in sentences of uniform length.

Remember, in movies you've camera distance, camera angle and the duration of scenes to help you spell out your color-and-action narrative.

Let's see how they might be applied to several typical movie opportunities! The best way to do this, of course, would be for us to look at movies together—best, but obviously impossible. And so, although scripts or scenarios are not at all necessary to home moviemaking, we'll momentarily enlist their aid.

(*C.u.* means close-up; *s.c.u.* means semi-close-up; *m.s.* means medium shot; *d.s.* means distance shot; *sec.* means the suggested duration of each shot in seconds.)

A DAY WITH DIANA

This is an outline for an indoor-movie subject, and we've yet to chat about indoor moviemaking. Although this outline is presented primarily to show how thoroughly and beautifully a movie camera can capture any event, if you have an indoor-movie opportunity coming up, please turn to page 109. You'll be pleasantly surprised to learn that indoor movies are even *easier* to make than those you'll shoot outdoors!

ne people say ten seconds is a
ble chunk of time , isn't it ?
ely or wide - expanse subjects
be most interesting , a movie
d - action narrative .
or us to look at movies
ng , we'll momentarily enlist
ggested duration of each shot
sented primarily to show how
ase turn to page 109. You'll be

ana as she dresses her .
for tem- perature .
ilk .
nouth . She's not sure she

	Sec.
c.u. Title—lettered out on bathroom mirror otherwise masked with coat of powdered cleanser.	8
c.u. A hand and cloth quickly rub away cleanser to reveal smiling reflections of Diana and mother.	8
m.s. Diana asleep in crib.	6
c.u. Diana again—now much closer—and still asleep.	5
s.c.u. Mother's arms, lifting Diana from crib.	5
s.c.u. Mother lowers Diana onto bath table.	4
m.s. Mother talks animatedly with Diana as she dresses her.	7
c.u. Diana's rapt and wide-eyed expression.	5
c.u. Bottle in warming pan . . . Mother's hand lifts it out, tests drop or two on wrist for temperature.	6
c.u. Baby's eager face, as Mother briefly teases her with bottle nipple. Diana then closes eyes ecstatically as she tastes warm milk.	8
c.u. Bottle, now half empty, is withdrawn.	4
s.c.u. Baby spoon is dipped into cereal dish.	3
c.u. Spoon, being brought to Diana's mouth. She's not sure she likes it, at first.	5

	Sec.
c.u. Bottle again—by now almost empty.	4
s.c.u. Mother, holding baby over her shoulder and patting her back.	6
c.u. Diana, delicately yet effectively, "burps."	3
c.u. She now polishes off rest of bottle's contents.	4
m.s. Diana, now in playpen.	6
s.c.u. She thoughtfully regards toy clutched in a chubby fist.	5
s.c.u. She yawns, her eyes take on heavy look.	6
c.u. Diana—again sleeping.	5
c.u. Clock face—reading "12."	4
c.u. Mother's hands, placing Diana's noontime food on stove to heat.	7
s.c.u. Mother feeding Diana bottle.	5
s.c.u. Mother, scooping last of Diana's lunch into her mouth, then picking her up to carry away for nap.	7
s.c.u. Diana being tucked into crib.	5
s.c.u. Mother, lowering window shade.	3
c.u. Water running into tub.	4
c.u. Mother's elbow, testing bath-water temperature.	3
s.c.u. Diana, chortling happily, being lowered into bath.	7
s.c.u. Mother's hand, lifting washcloth from water and squeezing it over Diana's head.	6
s.c.u. Mother, wrapping Diana in towel, lifting her from bath onto bath table and rubbing her dry.	7
c.u. Talcum powder being poured on Diana's tummy—her hand busily pats it about.	8
s.c.u. Diana being dressed for afternoon.	10
s.c.u. Back in playpen—busy with toy animals and rattles.	7
c.u. Floor-level shot from outside of playpen, as toy lands and rolls over.	3

	Sec.
c.u. Diana's grimly concentrating face.	3
c.u. Diana's hand with its wriggling fingers s-t-r-e-t-c-h-i-n-g to retrieve toy.	6
c.u. Her face again.	3
c.u. Toy now having been moved within reach —her fingers eagerly close on it.	4
c.u. Diana—now happily teething on rescued toy.	6
c.u. Clock face—reading "6."	4
c.u. Dad's hand, turning front doorknob.	3
c.u. Diana's head, turning at sound.	3
s.c.u. Dad, filmed low and from upward angle, shouting greetings to his daughter from doorway.	4
s.c.u. Diana, filmed downwards from Dad's viewpoint, excitedly waving arms.	3
m.s. Dad, holding Diana w-a-y up towards ceiling.	6
s.c.u. Dad, stowing Diana into still-oversized highchair at supper table.	5
m.s. Family, enjoying supper.	6
s.c.u. Diana, feeding herself from propped-up bottle with more or less success.	7
m.s. Dad, now in favorite living-room chair, with Diana astride his lap and very much engrossed with his eyeglasses or contents of his breast pocket.	8
c.u. Her hands, eagerly clutching at her father's possessions.	5
s.c.u. Dad, smilingly salvaging his glasses or fountain pen.	5
c.u. Clock face—now reading "8."	4
s.c.u. Diana, still on Dad's lap, but obviously getting drowsy.	5
m.s. Dad, carefully holding Diana up for Mother to take . . . she pauses in doorway.	7
s.c.u. Dad waves goodnight over shoulder.	3
s.c.u. Mother helps Diana to wave back.	4

ds from Dad's viewpoint ,

ents of his breast pocket .

.c.u. Mother helps Diana to

	Sec.
s.c.u. Diana is once more tucked into crib for sleep.	6
s.c.u. Mother blows her a goodnight kiss from doorway.	3
c.u. Mother's hand, clicking off light switch.	3

YOUR GARDEN

PEAT MOSS
VIGOR GROW
WEEDO

This is the subject, and not the title, of our movie outline. The title is achieved by the very first shot. The star of this movie could be hero or heroine. It could be about a flower garden or a vegetable garden. As we can only write it one way, we'll choose a hero—and a flower garden. But you can readily adapt its suggestions to your own gardening plans.

ould be hero or heroine . It
ırden . But you can readily

	Sec.
c.u. Opened front and back covers of seed catalog, with smoke rising behind them from pipe or cigarette of hidden reader.	8
c.u. From reverse angle: an over-the-shoulder shot showing part of catalog's inside pages.	7
c.u. Blissfully dreamy face of our hero foreseeing garden he will create . . . drawing deeply on pipe and staring ceilingward.	7

before the camera's lens .)
al garden - with smoke

skewered . s.c.u. Feet and
on .

	Sec.
c.u. Catalog pages again—this time swirling into oblivion. (It's easy! Just have someone puff a heavy cloud of tobacco smoke before the camera's lens.)	6
m.s. Presto!—envisioned garden swirls into focus! (This, of course, is a shot you'll have to make later in the year of the actual garden—with smoke puffed before the lens at the start of the shot—and the shot then spliced into the otherwise completed movie.)	9
s.c.u. Back to reality—avid gardener takes pencil from pocket and bends over catalog order blank.	6
c.u. Pencil ticks off seeds he wants to order.	6
c.u. If ordered by mail: a shot of his hand dropping envelope into mailbox.	4
m.s. Our hero again—now spading up untenanted flower beds.	8
c.u. Garden fork, turning over and breaking up earth.	6
s.c.u. Rake, spreading freshly turned ground.	5
c.u. Hand, positioning small stake on which identifying seed packet will later be skewered.	5
s.c.u. Feet and gray-clad legs of postman striding up house walk.	5
c.u. His hand—of course, it can be *any* man's hand—stuffing envelope or box of seeds into mailbox.	4
m.s. Our zealous and now-beaming gardener, emerging from garage with wheelbarrow and garden tools.	8
c.u. His hands, opening first seed packet.	4
s.c.u. Down on all fours—our hero painstakingly places seeds in preplanned position.	8
s.c.u. Tamping down earth over seeds with flat end of rake.	5
m.s. Our would-be Burbank again emerges from garage—this time toting coil of garden hose.	7

eliberately under - expose the
rst thrusting plant . s.c.u. He
illment . The point we're
climax of the garden in full
ıportunities for making close -
distance . But when you move
ıem on your living - room

	Sec.
s.c.u. Set for fine spray, he gently wets down his garden-to-be.	6
m.s. Darkness has set in—but our hero is still outdoors tending to garden! (It needn't, of course, actually *be* dark. You can deliberately under-expose the shot in good light by using two lens openings smaller than you normally would!)	7
m.s. In different garb, on different day, our tireless gardener anxiously paces alongside flower beds, scanning surfaces for first thrusting plant.	9
s.c.u. He pauses . . . quickly steps forward.	4
s.c.u. Down on all fours, he cautiously examines, then plucks, minute stem of green.	6
c.u. He stares at it, dubiously.	4
m.s. Convinced it's just a weed, he wrathfully tosses it away and resumes striding with hands thrust deep into pockets.	8
c.u. Up close—and up *really* close—several small plants can now be seen shouldering their way upwards toward sunlight!	6

And so it goes—as the garden is weeded, thinned, cultivated, perhaps sprayed and pruned, on its way toward flowering fulfillment. The point we're trying to make is that preparatory shots, such as have been outlined here, help tremendously to build up to the really dramatic climax of the garden in full bloom.

Notice how many close-ups we propose in these little word pictures? In the first place, a garden is the opportunity of all opportunities for making close-ups. For, beautiful though it is, a garden is a kaleidoscopic and sometimes confusing pattern when viewed or filmed at some distance. But when you move in close . . . and then even closer . . . your camera can "pluck" flowers, bloom by bloom, and your projector will reproduce them on your living-room screen far larger and more beautiful than you could enjoy them in life!

up with a parade of close

s the very first shot .

When your garden's grown and is ready for the garnering, squeeze off a shot or two to show it in its entirety. But follow these up with a parade of close-ups! You and your every movie audience will never be able to get too many of them.

y bearing birth- day

A BIRTHDAY

This, too, merely identifies the subject of our movie outline, and is not intended as the phrasing of its title. Here, too, the title is the very first shot.

	Sec.
c.u. Birthday cake—lettered to give name of birthday child, and carrying number of candles that give her age.	7
s.c.u. Birthday-girl's face, and that of her mother, reflected in mirror of Mother's dressing table.	6
m.s. Mother, helping daughter to primp for party.	5
c.u. Youthful hand, pressing front-door bell.	3
m.s. Arrival of several of young guests, dressed to the nines, and self-consciously bearing birthday presents.	10

	Sec.
s.c.u. Guests individually present gifts. Each . . .	5
s.c.u. Birthday celebrant, opening a few of her presents. Each . . .	5
s.c.u. One of party mothers, tying blindfold over eyes of one of boys.	5
m.s. Boy, wandering uncertainly past camera, with one extended hand holding pin and donkey tail.	6
s.c.u. From over boy's shoulder, as he approaches likeness of a donkey pinned to wall.	6
c.u. His hand sticking donkey tail, likely as not, onto animal's nose.	4
c.u. His blindfold removed . . . he registers surprise and consternation at his "guess."	5
s.c.u. One or two other guests, and their attempts at game. Each . . .	5
s.c.u. Winner—and his or her prize.	6
s.c.u. Mother, calling children to an apple-bobbing tub.	4
m.s. Children crowding around her.	5
c.u. Tying protective towel around first contestant.	4
s.c.u. From one side . . . as he submerges in pursuit of apple.	6
c.u. His dripping but triumphant face as he surfaces with apple clutched in teeth.	5
s.c.u. Other attempts, with varying degrees of success. Each . . .	5
s.c.u. Mother calls from dining-room doorway.	3
m.s. Hungry youngsters, crowding about colorfully decorated table.	7
s.c.u. Birthday girl and several of her guests shown individually as they enjoy party repast. Each . . .	4
m.s. Mother enters room with birthday cake, candles all a-glowing. She pauses to cue singing of "Happy Birthday."	8

, onto animal's nose .

	Sec.
s.c.u. One or two quick glimpses of singing children. Each . . .	4
s.c.u. Cake being placed before birthday girl.	6
c.u. She draws b-i-g breath.	3
s.c.u. From side of cake opposite her—as she huffs, and puffs and blows them all down.	7
c.u. She raises cake knife.	3
s.c.u. First piece, as it's shakily, yet safely, transferred to a plate.	5
s.c.u. She passes it to one of her guests.	4
m.s. All children, busily consuming dessert.	7
c.u. Adult hand, pressing doorbell.	3
m.s. Youngsters and their parents at door, as former "make their manners."	7
s.c.u. Birthday celebrant, surrounded by many presents she now has an opportunity to examine.	6
m.s. Chaos of dining room—after a few seconds of which camera slowly panorams over to show Mother, plate of birthday cake in her hands, wearily slumped into chair.	8

Panorams, usually, are poison. But, done rarely, done to make a point and done s-l-o-w-l-y, a pan is perfectly permissible.

	Sec.
s.c.u. Her daughter brings favorite present to her mother to be admired.	6
s.c.u. Mother shows pleasure in gift—and her little girl kisses her affectionately.	5
c.u. Mother, now smiling happily, takes generous forkful of cake. Y-u-m—it's delicious!	6

A DAY AT THE ZOO

Once more, the title of our outline is not intended as the title for the movie it suggests. For there's no need to use a static "word" title when, as is so often

in her hands , wearily
ɔle .
' title when , as is so often

nent in the life of a small child
t will be of interest to every

the case, there's a live and even a moving title to be shot.

A visit to a zoo—or carnival, fair or any other spectacle for that matter—is a wonderful opportunity for capturing a big moment in the life of a small child. At a zoo, also, a movie camera can make a realistic record of the colorful, amusing and sometimes awesome inmates that will be of interest to every movie audience.

	Sec.
m.s. Zoo entrance, and its identifying sign, as Father and boy walk through it and away from camera.	8
m.s. From head-on—boy and Dad approach camera. Boy tugs Dad to one side.	8
d.s. Glimpse of popcorn vendor, down park path.	5
s.c.u. Boy points. Father stops . . . digs in pocket for change. Boy takes it and hurries out of picture.	7
s.c.u. Boy buying bag of popcorn . . . he turns and runs back toward father.	6
m.s. Pair again walking, with boy busily munching on popcorn. He stops to offer some to Dad—who accepts.	8

	Sec.
s.c.u. Boy points ahead inquiringly.	4
c.u. Zoo-cage sign, identifying and describing as-yet-unseen inmates.	7
m.s. Zoo inhabitants, as seen through cage bars.	7
c.u. Boy's intent expression. He turns his head to ask Dad question.	7
c.u. Inmates again—this time, if possible, in telephoto shot.	7
s.c.u. Boy spies something else of interest to one side.	4
m.s. Park squirrel, cautiously approaching.	6
s.c.u. Squirrel still approaches as boy, with palm-upward hand, extends offering of popcorn.	7
s.c.u. From one side as squirrel, actually old hand at this business, darts in . . . tucks several kernels into his mouth . . . then flicks away a few feet to enjoy his meal.	9
m.s. Another zoo inhabitant, as boy and father walk into view.	6
c.u. Cage sign.	5
s.c.u. More of zoo inmate, as it dozes, paces, swims, scampers—or thoughtfully scratches its ribs.	6

ıg of popcorn .
s away a few feet to enjoy his

And so with many of the other furred, feathered or flippered zoo dwellers. If their action, or lack of it, is not interesting, perhaps you can return shortly—at feeding time, perhaps. Be equally alert for shots of the boy's reactions to their antics—for what's a zoo without kids, and especially your own?

rhaps you can return shortly -
specially your own ?

	Sec.
s.c.u. Feet of boy and Dad, trudging along park path. They approach a bench.	7
s.c.u. Dad wearily mops brow—but his son and heir eagerly points to one side.	6

	Sec.
c.u. Dad's hand goes into trouser pocket to come up with more change. Boy's hand grasps it.	5
s.c.u. Dad shouts to vanishing boy and holds up two fingers.	4
m.s. Boy hurries back—carefully carrying two bottles of pop.	6
c.u. Dad takes appreciative sip . . . turns and raises bottle to boy in toast.	6
c.u. Boy grins back at him, and raises own bottle.	5
c.u. Now-empty bottles are placed on soft-drink counter by Dad's hand.	4
c.u. Dad's feet, wandering along park path, pause before pattern of cage bars.	6
c.u. Dad's feet shuffle wearily past park bench.	5
c.u. His feet, slowly ascending park steps.	7
m.s. Park entrance again, as viewed from outside. Dad comes into full view—with boy perched on his shoulders, one hand clutching balloon cord, the other fresh bag of popcorn!	10

clutching balloon cord , the

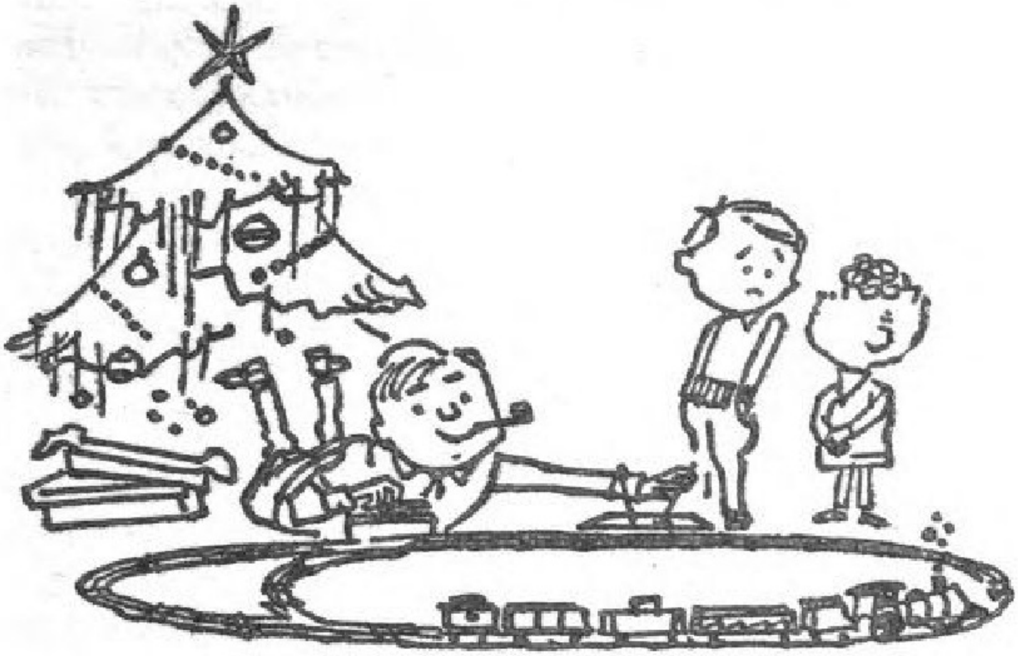
ry year - is worth a lot more
ites its own continuity !

CHRISTMAS

Christmas is a family time—a happy and a colorful time. Christmas—the most significant movie opportunity of each and every year—is worth a lot more than a few movie shots, fired from the hip. Christmas, surely, is feature-movie material. Fortunately, Christmas also writes its own continuity!

	Sec.
c.u. Your own Christmas card—as filmed by close-up or telephoto lens on your camera, or by titling device.	8
c.u. Hands securing Christmas-tree butt to tree holder.	6

ngly scribbling note to Santa .



	Sec.
c.u. Short series of shots of hands, old and young, fastening variety of tree ornaments to branch tips. Each . . .	4
m.s. Full tree, with family standing admiringly about, as Dad affixes very topmost decoration.	8
c.u. Childish hand, painstakingly scribbling note to Santa.	6
s.c.u. Youngster, tucking her note into colorful stocking hung from mantelpiece.	6
c.u. Young and be-slippered feet, grudgingly climbing stairs.	5
c.u. Dad's hands, removing wrapped gifts from closet shelf or other hiding place.	5
c.u. Ditto, Mother's hands.	5
s.c.u. Presents, being nested under and about tree.	7
m.s. Christmas-tree corner—in all its colorful glory!	8
c.u. Hand, blinking into blackness after second or two, as it presses room light-switch.	5
m.s. Tree lights, glowing against darkened room. (This shot should be attempted by only those with a 1.9 or faster lens.)	7

of unexposed yet processed

Now a few seconds of completely blank and black film, to indicate the nighttime interval. If you don't already have a length of unexposed yet processed film, just cup one hand over your camera's lens and press the exposure button for a few seconds.

	Sec.
c.u. Youngster's Christmas stocking, with note to Santa now supplanted by small gifts and goodies.	6
c.u. Youthful feet, walking hurriedly to parents' door.	4
c.u. Youthful hand, knocking.	4
c.u. Dad's feet, sliding into house slippers.	5
c.u. Young feet, hurrying down stairs.	4
s.c.u. Children's faces, framed in living-room doorway.	5
m.s. Mother or Dad, seated by tree, extending first Christmas package.	5
s.c.u. Child, eagerly accepting.	4
c.u. Her hands, wrestling with ribbon and wrappings.	5
c.u. Closest possible shot of wonderful new toy.	4
s.c.u. Youngster, hugging or admiring her gift.	7

And so it goes, in a series of shots of varying duration, made from varying distances, as family members unwrap and admire their holiday gifts. Soon, however, one toy will prove of most appeal to each child—sometimes, an elaborate gift; sometimes, the simplest. For our purposes here, let's assume it's a first train set.

	Sec.
c.u. Young hands, assembling train tracks.	6
c.u. Same hands, hooking train car to engine.	5
c.u. Dad's interested expression, as he lowers new pipe from mouth and leans forward.	4

room doorway .

ire their holiday gifts . Soon ,
ır purposes here , let's assume

forward .

t hands of Dad . m.s. Two

ns , and , in effect , upon

ıe looks around table " to

	Sec.
c.u. Young hands again, now contending with switch or transformer. They're replaced, after a few seconds, by more competent hands of Dad.	8
m.s. Two engineers—spread out full length on living-room floor.	6
c.u. Boy's hand, operating starting switch.	4
c.u. Engine and train, viewed from floor level, as it picks up speed.	5
c.u. Boy's absorbed countenance.	4
c.u. With camera dead ahead of track straightaway, but just beyond turn—flyer is shown roaring down upon your camera's lens, and, in effect, upon your movie audiences!	5
s.c.u. Mother's hands, lowering oven door and sliding out a steaming turkey.	6
c.u. Turkey being basted.	5
c.u. Crimson cranberry sauce, sliding into its dish.	4
c.u. Yellow butter being stirred into green peas.	5
c.u. Candied sweet potatoes, or yellow squash.	4
c.u. The browning pie, or mouth-watering pudding.	5
m.s. Colorful and gaily decorated table—as yet uninhabited.	6
c.u. Mother, calling family to dinner.	4
m.s. Previously uninhabited table, abruptly and miraculously manned by rest of family.	6
s.c.u. Father, with carving set raised for action.	4
c.u. Mother, in kitchen doorway, beckoning.	3
s.c.u. Father enters, bearing turkey on platter.	5
c.u. With turkey now before him, he looks around table "to take orders."	4
c.u. Carving knife, as it makes its first slice.	5

More dinnertime Christmas shots can, and probably will, be made. But some restraint is suggested

ne for enjoying fine food .

l . Children will eagerly return
itably , the day must end . It's
v with eyes that are becoming

here. For, fun though movies are to make, and wonderful though they are to see, there's both a time for moviemaking and one for enjoying fine food.

After dinner, good friends may come to call and to admire the tree and its bounty. Here are more shots for the holiday record. Children will eagerly return to new toys indoors, or to outdoor play on skis or sleds or bikes or skates—and here are more movies to be made. But, inevitably, the day must end. It's the children's day, and it can fittingly end with them—perhaps still on the living-room floor with a favored plaything, yet now with eyes that are becoming a little heavy lidded after the length and excitement of the day.

upstairs . s.c.u. Mother tucks

	Sec.
c.u. Clock face, registering bedtime hour.	5
c.u. Mother, stifling a yawn . . . looks at clock . . . speaks.	6
s.c.u. Dad, pretending to read book, awakes with start.	4
m.s. Dad picks up youngster . . . lifts up for goodnight kiss . . . carries over to foot of stairs.	8
s.c.u. Mother and youngster start upstairs.	5
s.c.u. Mother tucks in child for night.	6
c.u. Her hand, pressing room light-switch.	3
m.s. Again—softly glowing lights of now-deserted tree in living room.	7

These are some of the things you can make into movies! But first, let's run through a brief check list of movie fundamentals.

So much so that black -
Color film , remarkably
is lifelike . Remember how
ut " and others to come out
of course , did clouds , and

makes the estimation of ex-

CHAPTER 4

Before You Start Shooting

WE'VE chatted about movie cameras, about some of the many opportunities for using them and a bit about how to do it.

Fine enough. But how about film?

There's not much of a problem here, either, because full-color film is the overwhelmingly popular favorite of moviemakers. So much so that black-and-white film has become a special-purpose film and is today generally available for only some sizes and types of cameras. Color film, remarkably inexpensive in the 8mm size, is not only far more lifelike but every bit as easy to use. And this is true for the very reason that it *is* lifelike. Remember how, in black-and-white snapshots—and in black-and-white movies, if you've ever made them—certain colors tend to "wash out" and others to come out surprisingly dark? Blue sky, for example, registered so fast on many black-and-white films that it showed up as white. So, of course, did clouds, and that whole important area of many pictures was more or less a blank unless you used a yellow filter to slow down the sky.

But color film doesn't have to interpret colors in grays or blacks or whites. It sees them in color, just as does your eye, which makes the estimation of exposure a very natural and simple matter.

▶ *Two types of light—two types of film*

Daylight Type Kodachrome Film is color balanced to show things in their proper colors under the blue-white light of outdoors—and outdoor light, daytimes, *is* blue-white. Sunlight, itself, is white. But a lot of daylight is reflected from the blue sky. Shoot a subject in the shade of a building, for example, and about the only light that reaches it—and quite a bit of it does, at that—will come from the sky.

The second type of color film is Kodachrome, Type A, which is color balanced for indoor light provided by low-cost yet brilliant photoflood lamps. Their light looks white, too, and to a degree it is, certainly as compared to normal "yellow" room lighting. Yet, there's no blue sky to tone it, and by contrast to that of outdoors it's more on the "warm" side—to which the qualities of indoor, or Type A, color film are perfectly matched.

▶ *One film can do double duty!*

Most moviemakers have been using each color film in its own field. Yet, more and more are using one of the two films in both fields by the simple expedient of slipping an inexpensive reddish filter over the camera's lens when using indoor film in the more blue-white light of outdoors. This outdoor filter for indoor film gives Type A not only the same color balance as daylight color film, but also the same exposure speed. You shoot with it just as though you had outdoor film in your camera!

So popular has one-film shooting become that many of the newest cameras have built-in filters which can be flicked before the lens whenever Type A is exposed outdoors. This helpful filter can be obtained for any camera in an inexpensive mount that slips over or into the standard or auxiliary lens mount. For one reason, if for no other, one-film shooting has much to recommend it: No matter where or when a movie op-

s - and outdoor light ,
he shade of a building , for

illiant photoflood lamps .
blue sky to tone it , and by
ctly matched .

h fields by the simple
t of outdoors . This outdoor
. You shoot with it just as

the lens whenever Type A is
lard or auxiliary lens mount .

portunity occurs, you've always the right film in your camera with which to capture it!

▶ *Another filter you may want*

A Kodak Skylight Filter will improve your movies of distant scenes by absorbing ultraviolet light and "warming up" the pictures.

If you use Daylight Kodachrome Film outdoors, and do much moviemaking away from your front or side lawn, you probably should add a Kodak Skylight Filter to your kit. Its job is to absorb the excess blueness you'd otherwise encounter in shots made in the shade, for there's no white sunlight in shade, but only blue light reflected from the sky. Things also look a little blue on overcast days, when there's no direct sunlight and also in long-range scenics, in mountain views, in over-water and over-snow shots and in movies made of or from airplanes. The culprit in these wide-expanse views is usually an element known as "ultraviolet light," which you can't see but which color film can and registers as a blue-tinted veil across your scenes. The Skylight Filter eliminates this and "warms up" such shots!

s .
ould add a Kodak Skylight
vhite sunlight in shade , but
in long - range scenics , in
panse views is usually an
our scenes . The Skylight

A Color Film - not only
plenty of reason , as you can
item known as the " Kodak
that it allows light rays
en blue skies dramatically
ly from non- metallic surfaces
nderstand , the usefulness of
pecial effects , and you may
, for not a single movie frame

▶ *No problem if you use filtered indoor film outdoors!*

Type A film's outdoor filter—the Kodak Daylight Filter for Kodak Type A Color Film—not only color balances indoor film for outdoor use and gives it normal outdoor speed, but also sponges up ultraviolet light. There's plenty of reason, as you can see, for considering a one-film shooting plan!

This is just about all there is to filters in the making of color movies—with one possible exception. This is a remarkable little item known as the "Kodak Pola-Screen," which is really not a filter at all, but a polarizing device. The simplest way to describe its function is to say that it allows light rays vibrating in only one plane to pass through it to your film. Its effect, when the sun is at right angles to your camera, is to deepen blue skies dramatically and emphasize the whitest of white clouds. It'll also reduce haze and eliminate reflections entering the camera's lens obliquely from non-metallic surfaces, such as glass, wood or foliage, so that they'll show up on your film in their true colors. While this may be a bit difficult to understand, the usefulness of a Pola-Screen becomes easy enough to see if you look at a scene through one while slowly rotating the Pola-Screen.

A Pola-Screen, admittedly, is not in the least essential to everyday moviemaking. Instead, it's for special occasions and special effects, and you may want to get it for precisely these reasons.

So much for film—and filters.

Let's load up!

▶ *Take your time when loading your camera*

If yours is a magazine camera, you can, of course, pop film in and out of it without a thought about its becoming light struck, for not a single movie frame in a light-tight film magazine should be "lost" in the process.

But, if your camera uses roll film, take it easy! It's

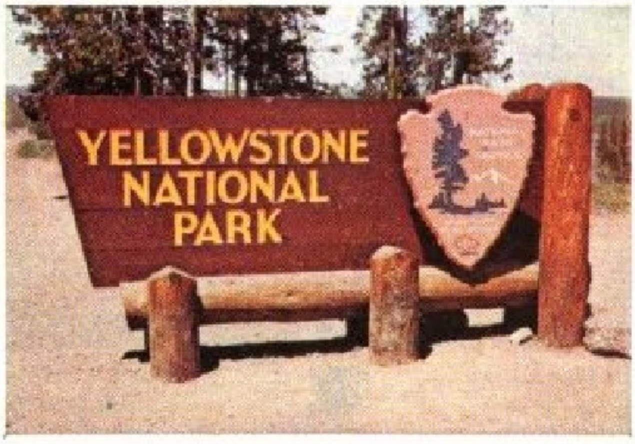
(Continued on page 85)

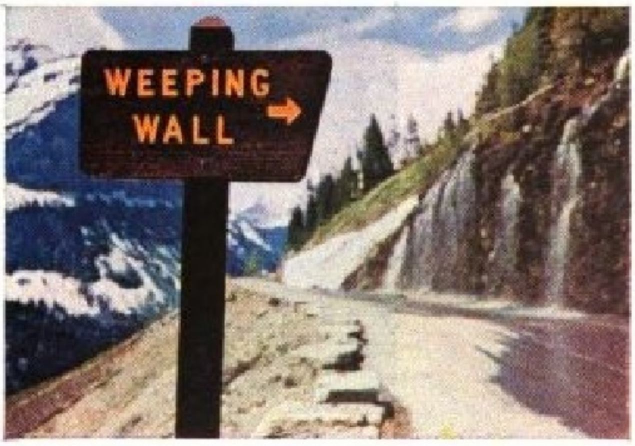
FOR THE PROFESSIONAL TOUCH—MAKE TITLES!

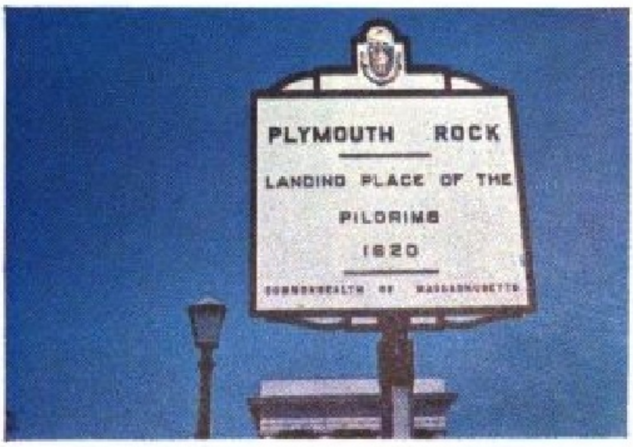
tles can be highway signs ,
e for your movie .

Every multimillion-dollar Hollywood epic begins with a title—and so should *your* movies.

No matter where you and your movie camera travel, you'll find ready-made titles, just waiting for you to shoot them. These titles can be highway signs, posters, billboards, historical markers or any of a hundred other things that will provide you with a good, easy-to-make title for your movie.


YELLOWSTONE
NATIONAL
PARK

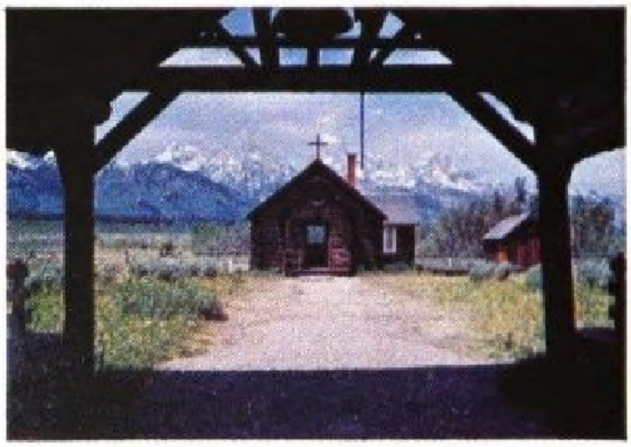

WEEPING
WALL

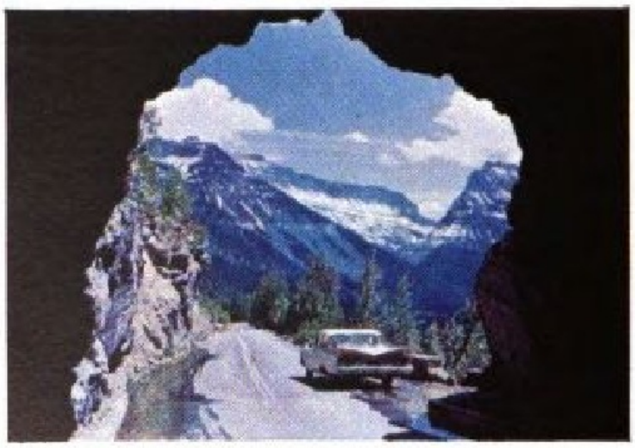

PLYMOUTH ROCK
LANDING PLACE OF THE
PILGRIMS
1620
COMMONWEALTH OF MASSACHUSETTS

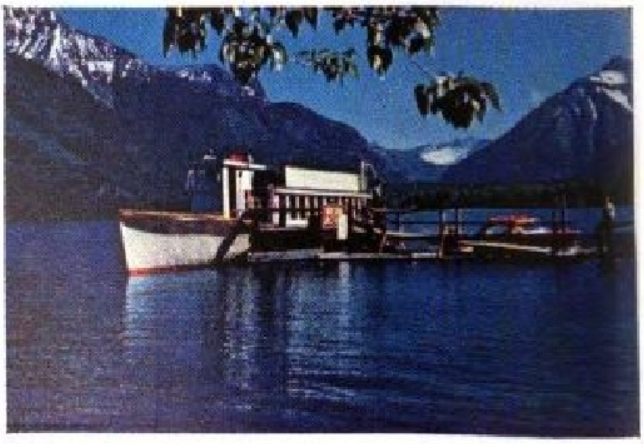
building . Notice how

EVER SEE A REMBRANDT WITHOUT A FRAME?

Almost any good view can be made better by "framing" it with an archway, some overhanging tree branches or the door of a building. Notice how framing gives a sense of depth and dimension to these scenes.







hes of the subject . And a
ide on your home - movie

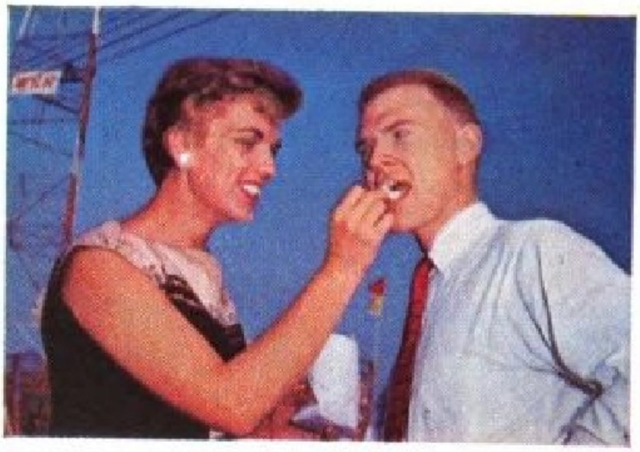
CLOSER AND CLOSER!

It's close-ups for color and impact—and they're especially easy with your movie camera. Focusing lenses let you get within inches of the subject. And a Kodak Portra Lens makes the least expensive fixed-focus movie camera a close-up champ. Imagine these scenes 3 or 4 feet wide on your home-movie screen!

neter .

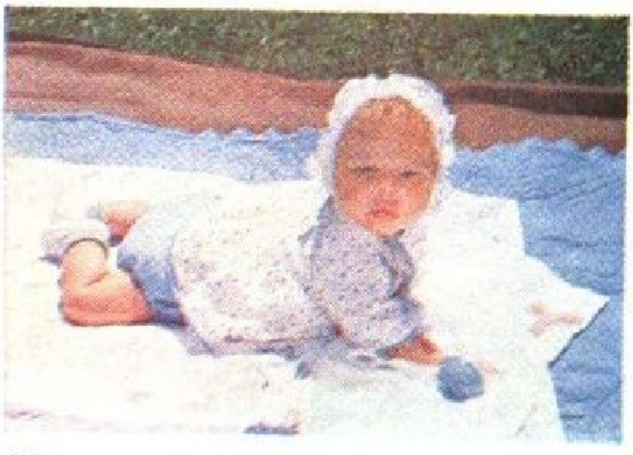
n the shadows .

SOME LIGHTING HINTS



1. This is a "normal" subject as far as lighting is concerned. Plenty of sunshine and blue sky, and no need for an exposure meter.

2. Back-lighted subjects like this usually require a half-lens-opening more exposure than front-lighted scenes.

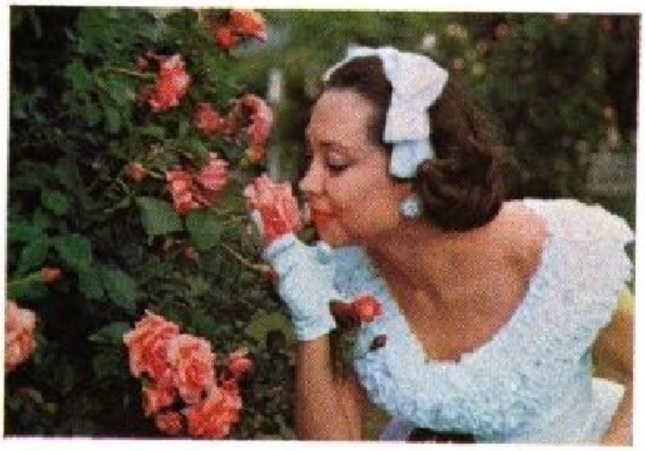


3. No increase in exposure was needed for this back-lighted subject, because the white blanket acted as a reflector that filled in the shadows.

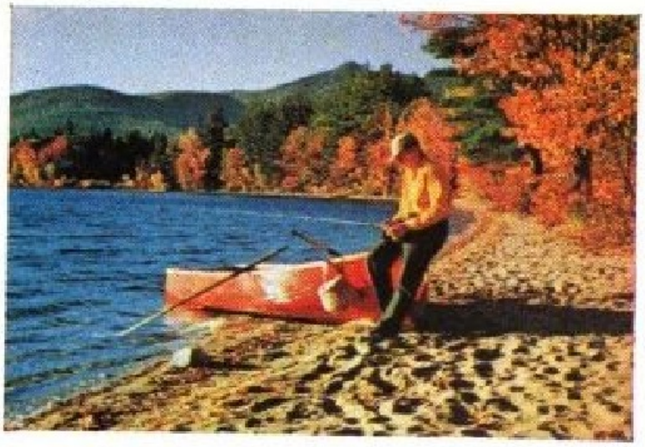
natic camera .

mes , so use an ex- posure

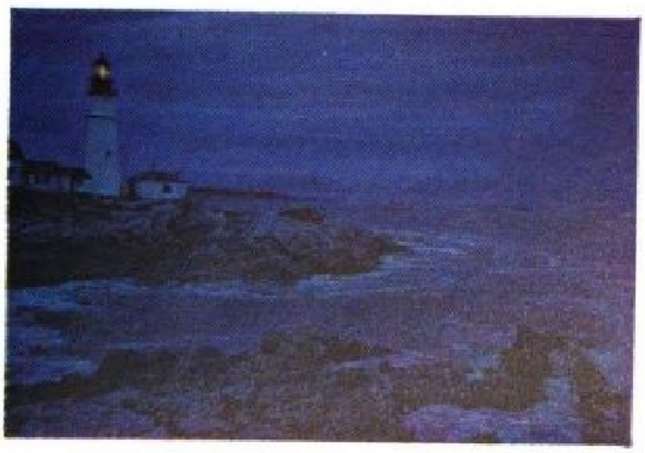
4. Overcast and hazy days produce soft, even lighting like this—no shadows or squints. Use a light meter if you haven't an automatic camera.



5. Early and late in the day you can make pleasing pictures by the warm, ruddy light of the sun. The sun isn't as bright at these times, so use an exposure meter or an automatic movie camera.



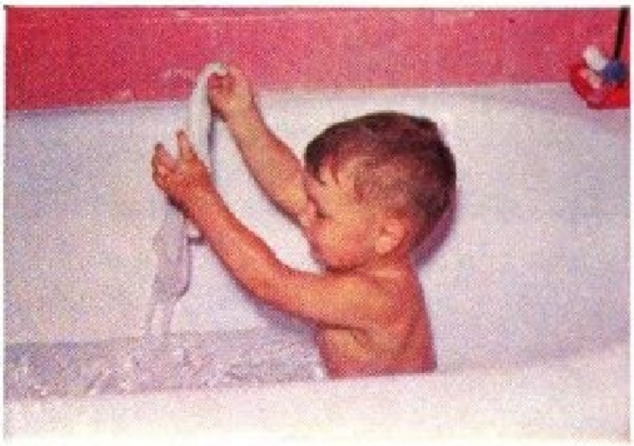
6. Even after the sun goes down, an *f*/1.9 lens will capture the rich blue sky at twilight, with results like this.



ow far the lights are from
maller than the light bar's

INDOOR MOVIES? EASY!

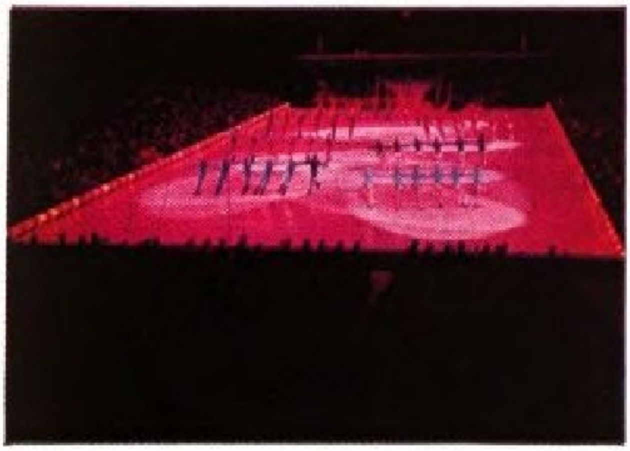
With a movie light bar and some reflector-type photoflood lamps, you're in business. Just set the lens opening according to how far the lights are from the subject. Small, light-colored rooms like kitchens and bathrooms reflect a lot of light, so you can use a half lens opening smaller than the light bar's exposure chart calls for.

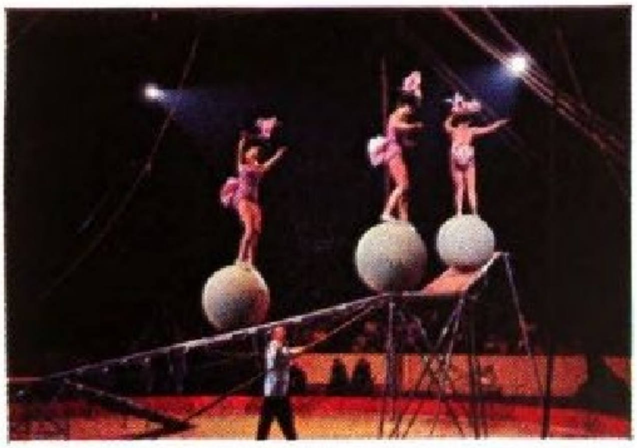


or faster lens . Use

INDOOR MOVIES BY "AVAILABLE LIGHT"

Well-lighted subjects such as ice shows, the circus, night club acts and other events can be captured if your camera has an f/1.9 or faster lens. Use Kodachrome Film, Type A.

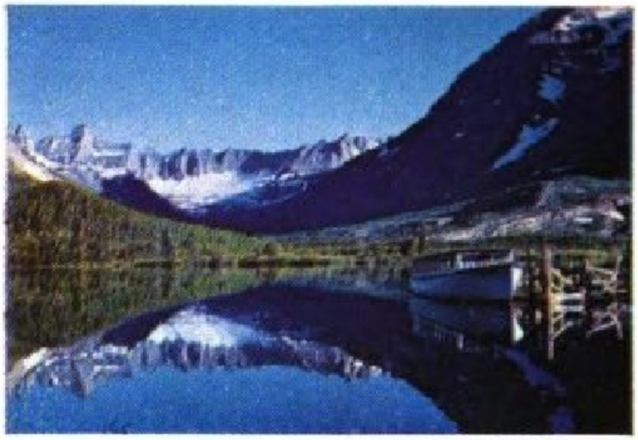




ıe same relative positions .

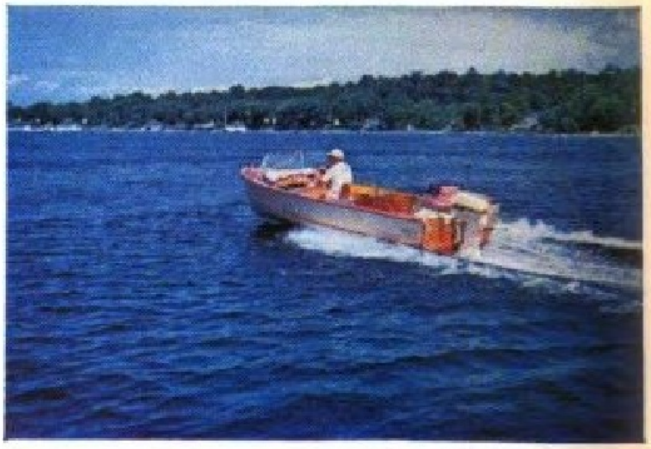
se to " get it all in . " Use a

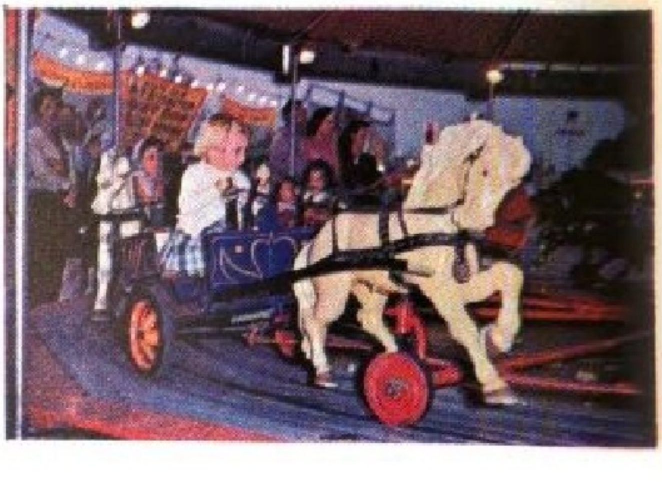
PANNING IS POISON!



When a lovely scene like this greets your lens, don't give in to the temptation to spray the camera back and forth like a garden hose to "get it all in." Use a wide-angle lens. If that doesn't include all you want, turn—very slowly—pivoting from the hips.

But this *isn't* panning. Swinging the camera to follow a moving subject isn't panning because the subject and the camera stay in the same relative positions. Try to "lead" the subject, give it room to move into the picture.

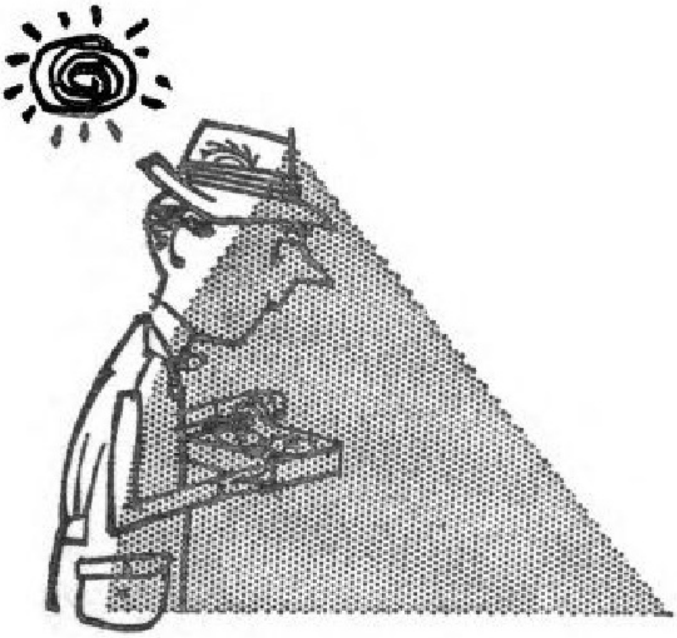




(Continued from page 76)

not the least bit difficult but, because it's so easy, it's also easy to become careless.

's becoming light struck .
, draw out a length of the
en doing for years with
un it up by the movie
g nicely at this stage , the



Always load and unload your camera in dim light. Even if you're out in the sun, you can use the shade of your body.

It's only good sense, for one thing, to load and unload your camera in dim light to avoid any of your unexposed or exposed film's becoming light struck. Your movie film comes tightly wound on a spool. You drop the spool onto one of the two film-seating spindles in your camera, draw out a length of the film, place it along a clearly marked path, and tuck the film tip into the core of a second or "take-up" spool—just as you've been doing for years with your snapshot camera. The only difference is that, instead of winding your film up to the starting point as you do for snaps, you run it up by the movie camera's motor and run it for a few seconds, *with the camera cover open,* so you can check the film flow. If everything is running nicely at this stage, the odds are long that they will keep right on running beautifully for the full length of the film roll!

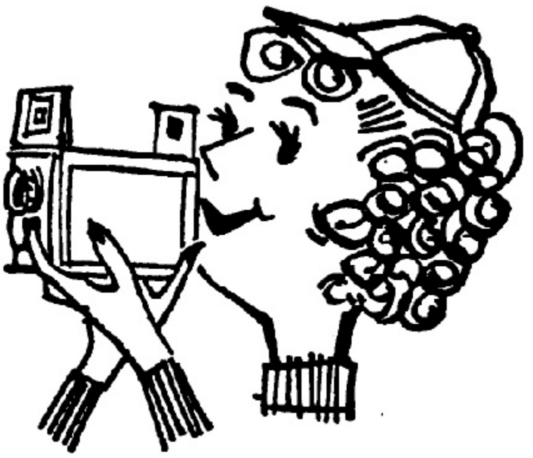
Of course, even in dim light, such brief cover-open

There are , you see , several
;ainst is direct , bright light's
ıands as comfortably and as
ing the view of either the lens
ꝫ no difficulty holding a camera
ıce , there's no reason for not

operation is going to fog a bit of film thoroughly. But don't worry about it—you're not wasting any of your true film footage. There are, you see, several extra feet of film at the start of every roll—and more at the end—to protect the full and proper footage. The thing to guard against is direct, bright light's sneaking past the outer coils of film on a spool, to fog the edges of the coils beneath them!

All loaded? Fine. Now, how are you going to hold your movie camera?

▶ *Steady does it!*



The right way to hold a movie camera is the natural and comfortable way.

Movie cameras today come in a variety of sizes and shapes. No matter what the shape, the right way to hold one is in both hands as comfortably and as firmly as possible, with one finger of one hand on the exposure button and, perhaps needless to say, with no fingers blocking the view of either the lens or the finder.

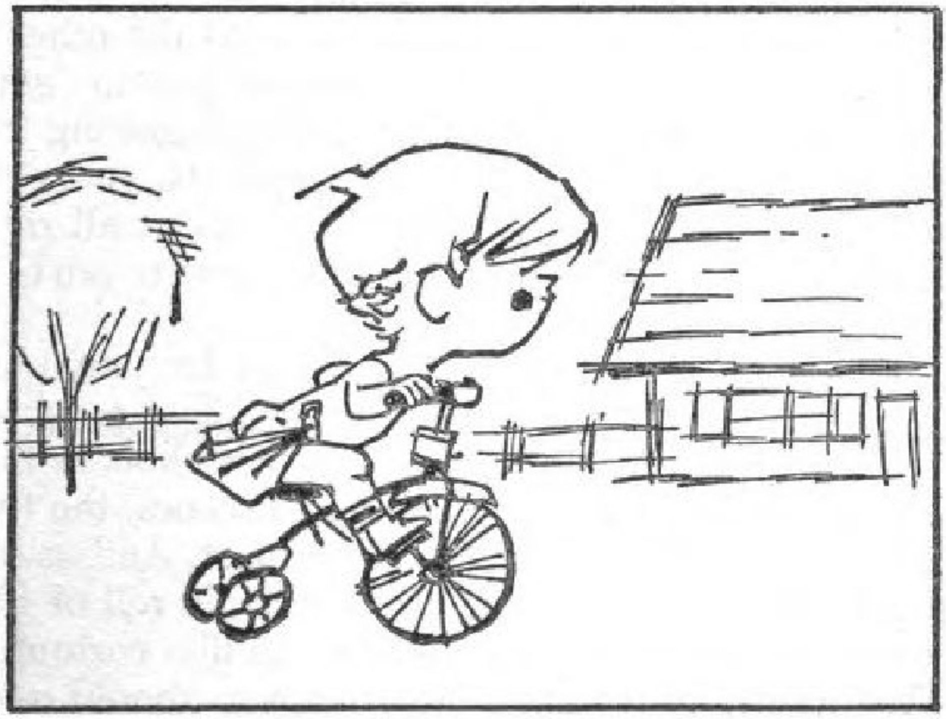
The really important thing here is steadiness. If your camera wobbles, your pictures are going to wobble. Most people have no difficulty holding a camera with reasonable and satisfactory steadiness. Even so, if there's a tree handy, why not lean against it? If there's a wall or fence, there's no reason for not resting your elbows on it—or even the camera itself, if you can sight it conveniently. Some moviemakers, in fact, use a tripod for complete picture steadiness. But this, while almost essential for professional effects with professional-type equipment, and for long-range telephoto shooting with *any* movie camera, really shouldn't be necessary for the making of everyday personal movies.

There's another type of camera motion with which we might as well come to grips right now—and this is known as "panoraming!"

► *A choice of "whoa!"—or woe!*

It's not at all surprising that most moviemakers, having long since learned that they can't swing a snapshot camera when shooting, simply can't resist the temptation of a new-found freedom to "wave" their movie camera—especially when there's no motion in their targets. For, if *they* won't move, then, by golly, we'll move the camera so's to get motion in this film one way or the other!

But this isn't the idea of movies, at all. A movie



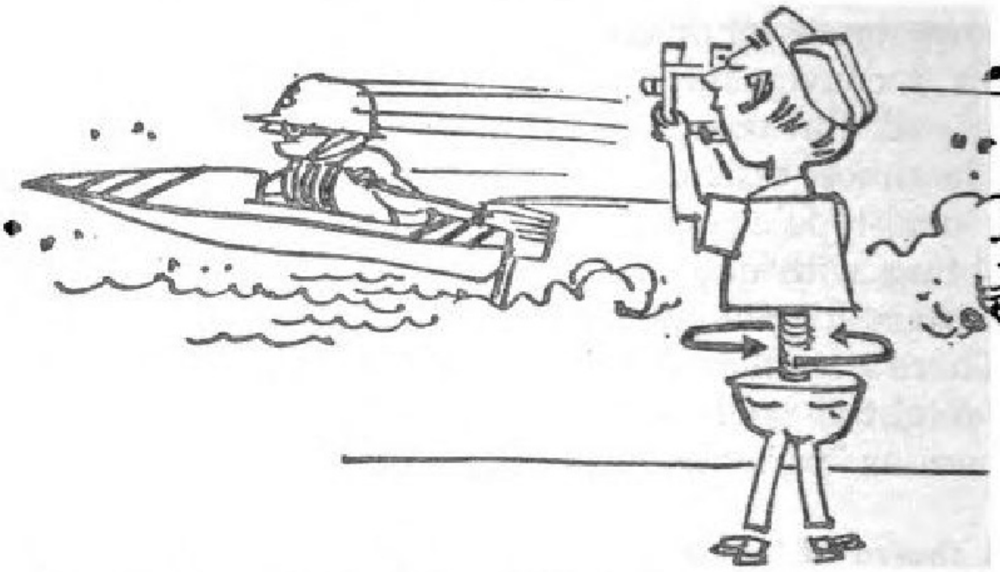
When you swing your camera to follow a moving subject, the background will be blurred but the main subject will look sharp.

e picture steadiness . But
ng with any movie camera ,
ng ! "
ng , simply can't resist the
, if they won't move , then ,

there's something or someone
ound . Yet , if you want to
hough its background will
nera from one side to the other
u would in snapshots , you get

u don't look at movie shots as
p to fifty movie shots on a

, and when it's done properly



To make a smooth "pan," spread your feet and pivot from the waist.

camera is made to record motion, not to provide it. If there's something or someone moving in a movie scene, the camera will capture that motion, naturally, against an equally natural and rock-steady background. Yet, if you want to follow a moving object by swinging your movie camera to keep it in the finder, fair enough. Your target should be sharp, although its background will inevitably be a bit blurred by the camera motion. But following action isn't panoraming! Panning is when you swish your camera from one side to the other or from the top to the bottom of a target, just to "get it all in" with the result that, instead of getting *one* blurred picture as you would in snapshots, you get a *series* of blurred pictures. They'll be movies all right, and perhaps useful movies. But they won't—can't—be crisp!

After all, there's seldom good reason for panning a movie camera. You don't have to get all of a subject into one picture. You don't look at movie shots as individual scenes, but rather as a series of scenes, the total of which make one movie of one subject. And as you can get up to fifty movie shots on a single roll of film, you can pack a lot of subjects into one film carton!

This doesn't mean that a movie camera should *never* be panoramed. It certainly should be—when there's a really good reason, and when it's done properly.

ew as you did when you first
gradually swinging your

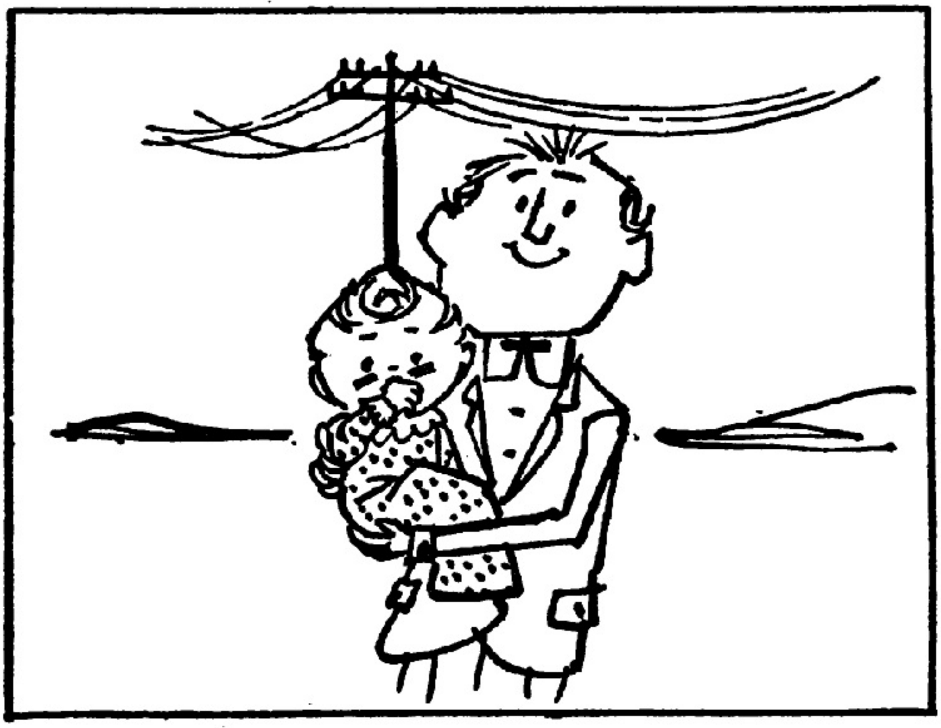
n see in the finder - for shots
be to shoot , that your

One good reason would be to start off a reel made, let's say, at a vacation site, so that your audiences can soak up the same view as you did when you first admired it. And the way to make such a panoram is s-l-o-w-l-y and s-m-o-o-t-h-l-y—pivoting at your waist . . . gradually swinging your camera to the most important object in the view . . . then holding on that object or area for several seconds.

For ninety-nine shots out of a hundred, steady does it at the camera end of moviemaking!

▶ *Good sighting makes the good shot*

It's no trick to sight a movie camera. All you do is point it, look through the finder and squeeze the exposure button. What you see in the finder—for shots of average distance—is what you'll get on the film. But no more. And no less. So it's wise to be certain, eager though you may be to shoot, that your camera finder is framing just what you want on your film and on your screen.



Look behind the subject, too! You can often improve a picture by moving a little to one side or the other.

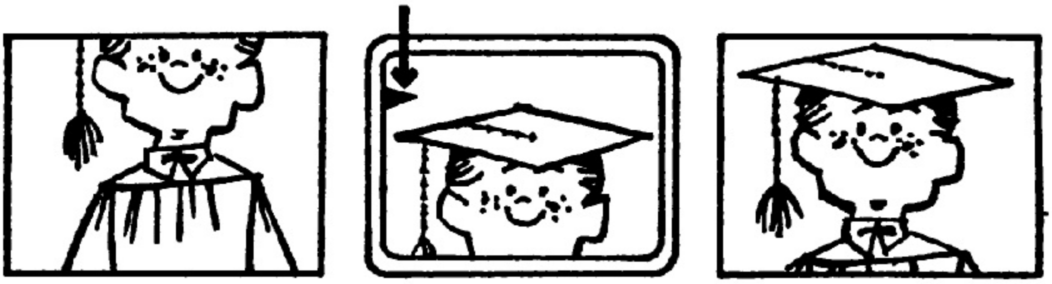
either side to maneuver
ch , in many instances , will
ke clear a little further along

p of the desired picture area

ooting up really close , which
to the fact that your camera's
ect at a medium distance out
at the top of the finder . And it
llax , " most camera finders

Maybe you're up too close. More likely, you're too far back. Perhaps you'll get a more attractive shot if you step a few feet to either side to maneuver something you don't want out of the background. Or maybe you'll want to squat down for a more interesting viewpoint which, in many instances, will also give you that finest of all backgrounds—blue sky and white clouds. There's no mystery to good composition—as we'll make clear a little further along in this book!

▶ *A caution on close-ups!*



What you see through the viewfinder close-up may not be what the lens sees. Have the close-up indicator (arrow) at the top of the desired picture area when making close-ups.

There's one time when your camera finder will *not* show you the picture your lens will put on the film. This is when you're shooting up really close, which can be done so effectively and dramatically with a movie camera. This situation, for which there's a ready solution, is due to the fact that your camera's viewfinder is probably looking at things from a slightly higher position than that of the lens. The lines of fire of the two intersect at a medium distance out front and work together very nicely—for all targets except close-ups. Here the lens won't see some of the image you can see at the top of the finder. And it will see an equal area of the scene below the bottom limits of the finder. To cure this predicament, which is known as "parallax," most camera finders have indicators—reading perhaps 2′ and 6′—a little below the top of their frames. Tip up your camera a little so that these indicators clear the tops of subjects at these distances and you'll never scalp a movie subject!

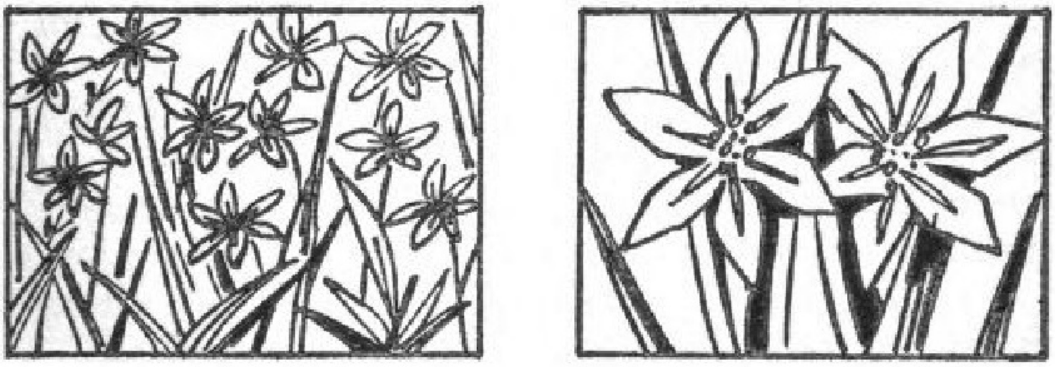
▶ *Two more items!*

Moviemaking's four equipment essentials, as we've said, are camera, film, projector and screen.

Yet there are two others you probably should acquire, neither of which is in the least expensive.

One of them may even come with your camera—and this is a carrying case. For one thing, it will protect your camera from bumps, scratches, dust and moisture. For another, you won't have to carry your camera—you'll *wear* it. If you choose a field case which holds the camera for you while you shoot, moviemaking becomes easier than ever as both your hands are free to make instant adjustments.

There are very good reasons, as you can see, why a carrying case is too good a bet to overlook.



Even fixed-focus movie cameras make fine close-ups—but to get in really close, use an inexpensive close-up lens.

So, many moviemakers agree, is a Kodak Portra Lens—especially for cameras with fixed-focus single lenses. A Portra Lens costs only peanuts, but what a whale of a job it does in enabling you to move in on subjects for close-ups that will make your movie audience sit up and take notice. With even the simplest movie-camera lens, for example, you can shoot as close as 3½ feet and make a pretty amazing close-up at that of an area only

ps , scratches , dust and
or you while you shoot ,
osts only peanuts , but what
notice . With even the
area only

ches !

inches ?

nany depends entirely upon
t now - let's take that camera

1 foot in width. But when you slip a Portra Lens over the camera's standard lens you reduce that foot-wide span to only 4 inches!

Ever make a picture of anything *that* small? Ever see it, in addition, on a screen as wide in feet as the original object was in inches?

There are, of course, other items you may, as you go along, want to add to your moviemaking-and-showing outfit. How many depends entirely upon your choice of equipment and upon what you plan to do with it. We'll get to these other aids as they turn up in our story.

Right now—let's take that camera outdoors!

chapter - that you can take

the full filming range ! The
rkable generalities most
pe in a guide . And you're

t meters and talk about light

y bright sunlight plays upon

CHAPTER
5

Getting the Best Results Outdoors

IF YOURS is a movie camera with a built-in exposure meter, it might seem that there's little reason for you to go further in this chapter—that you can take on all movie comers by a sight-and-shoot method.

But, whether or not your camera has a meter, better stay with us for a while if you want to enjoy top movie results throughout the full filming range! The markings on the yardstick of either a photoelectric meter or a printed guide must inevitably deal in generalities. These are workable generalities most times, yet ones which should frequently be interpreted to fit specific conditions that could never be built into a meter or set in type in a guide. And *you're* the interpreter for your movie camera!

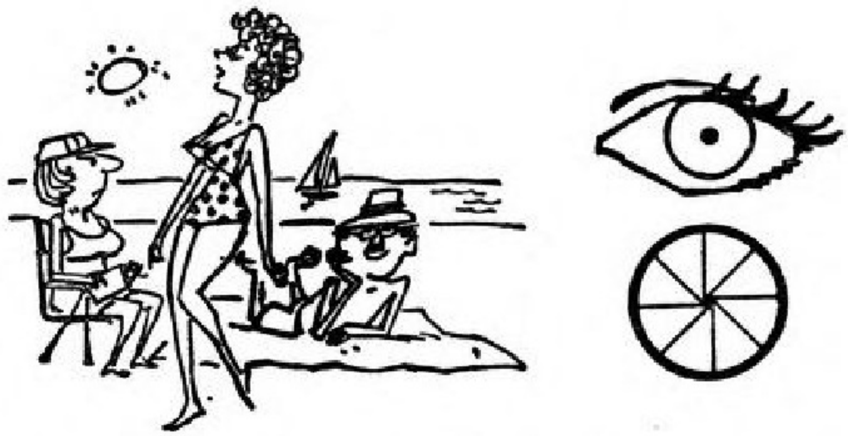
Exposure is *not* hard. We're going into it in some detail just to *prove* it's not hard. For the time being, then, we'll forget about meters and talk about light as it affects the camera's eye—in exposure-guide terms.

Compare the camera's eye to your own

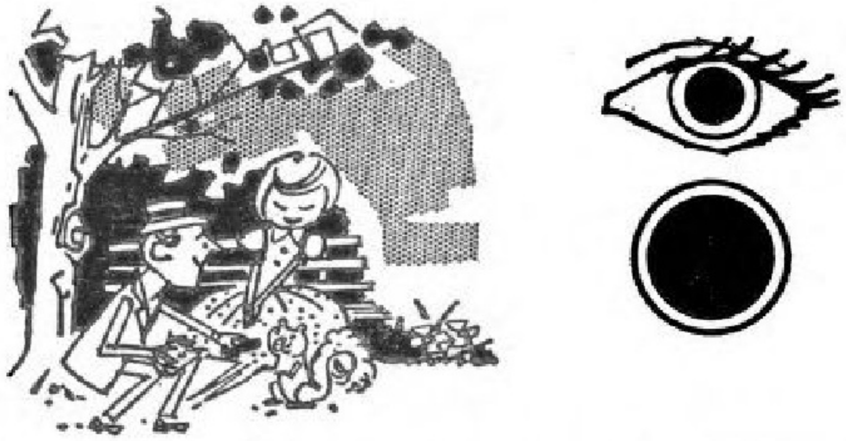
There's a "par" to light—to both the human eye and to the camera's eye. To the human eye, daylight par occurs when normally bright sunlight plays upon normally bright objects.

This situation can best be summed up in a scene of one or more people, in average-bright attire, on a hould also be set for a smaller

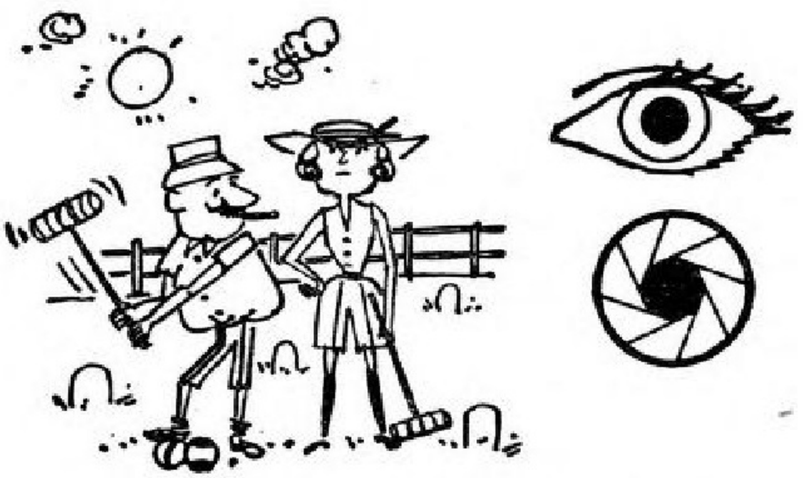
THE BEST RESULTS OUTDOORS



When a scene is very bright—as it is on the beach—your own eye closes down to a small opening. Your movie-camera lens should also be set for a smaller-than-normal opening.



When things are in the shade, both the human eye and the camera eye must be opened up to let in more light.



Most pictures you take will be of average subjects in the sun. This calls for an average-sized opening—called 8 on your camera's lens.

green lawn on a sunny day, with, perhaps, some trees, as well as a patch of blue sky and white clouds in the picture background. That's par. When scenes are extra-bright, either because objects are extra-bright themselves or because you look at them under extra-bright conditions, such as on sand or snow, the human eye squints a bit—until its iris closes down to compensate for the extra brilliance. When things are darker than normal, the human eye peers momentarily—until its iris opens up again to compensate. What it does, in effect, is adjust its "lens" opening so that, when brightness varies from par, it admits a little less of extra-bright light or a little more of dimmer-than-normal light. Therefore, you are able to see things with almost equal clarity throughout a wide range of subject and light brightness.

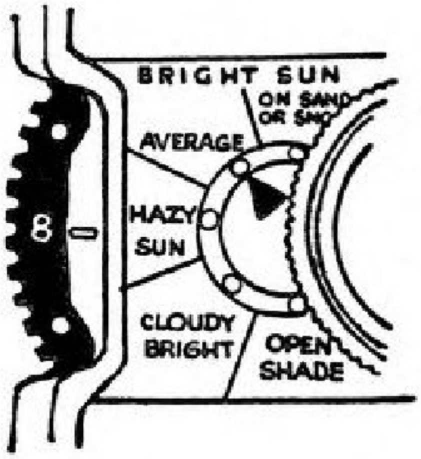
Precisely the same is true of the camera's eye. It, too, has a par opening for the same average-bright, sunlit subject. Its par opening is numbered, however, with the figure, 8. This is the size of lens opening used for the type of subjects of which, and the light conditions under which, most movies are made. You change from it for only one or both of two reasons. One is more or less than par in the brightness, the light-reflecting qualities, of what you are filming; the other, more or less than par in the brilliance of the light under which you are filming it. You make the camera's eye squint or peer, just as your own eye is inclined to squint or peer, and the effect is the same. Uniformly good exposure is obtained with subjects ranging from those filmed on blindingly bright snow or beaches at midday to those filmed in the subdued lighting of cloudy days or late-afternoon hours. Poor-light scenes, of course, won't be as brilliant or crisp as those made in bright light. But they will be as naturally colorful and detailed as they appeared to you when you shot them.

Most exposure guides sum up par with the simple phrase, "Bright Sun." They assume that your movie targets will actually be lighted by the sun, and that the sun will be playing full upon them. They also as-

nd . That's par . When
:onditions , such as on sand
: than normal , the human
iat , when bright- ness varies
see things with almost equal

pening is numbered ,
der which , most movies
lecting qual- ities , of what
:ra's eye squint or peer , just
ging from those filmed on
or - light scenes , of course ,
o you when you shot them .

ighted by the sun , and that



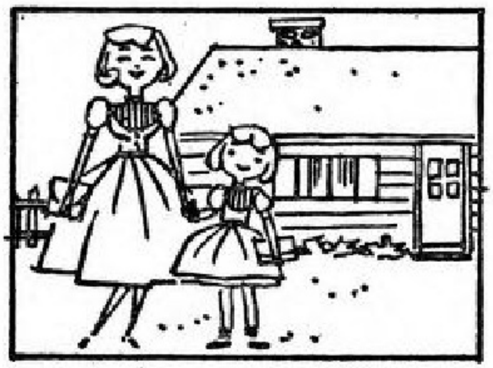
For average subjects in bright sun, just leave the lens set at 8.

altitude and in any latitude ,
e out of five shots !

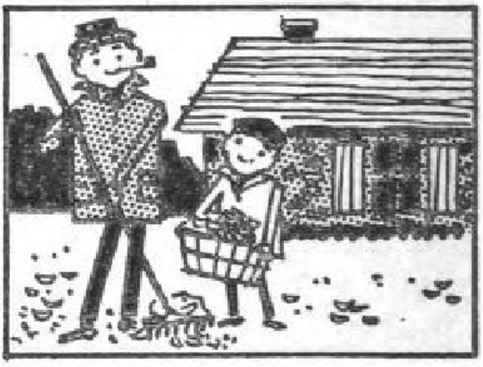
de only them in the picture .

sume that your subjects, themselves, are normally bright. Any movie opportunity, anywhere, at any time of the year, at any altitude and in any latitude, that is a close parallel to this, calls for that same 8 lens opening. This, you will find, will mean that you'll make about three out of five shots!

▶ *Subject brightness is also a factor*



The sun is no brighter than average—but the subjects are. Time to close down the lens a little.



The sun is just as bright here, but the subjects are dark—so open up the lens a little.

Perhaps the people you're about to film are wearing extra-bright clothing, and you've moved in really close in order to include only them in the picture. Obviously, here is a somewhat brighter-than-average subject—not much brighter, but surely brighter than par. Your eye will adjust to it easily. You can adjust the camera's eye just as easily, but not by much—only a fraction of an inch with your camera's lens-control lever or dial. For, you see, each full change in lens-opening numbers either halves or doubles the amount of light admitted to the film. The 11 opening lets in only half the light of the normal 8 aperture; the 5.6 opening, twice as much. These are truly big allowances—and one of the most important factors of good exposure is the realization that, very frequently, mid lens-number openings can be used to offset slight variations from par. Your somewhat-brighter group, for example, isn't twice as brilliant as an average-bright scene. Would midway between 8 and 11 be correct for it? It most certainly would—as, by the same token, halfway between 8 and 5.6 would be right for sunlit subjects which are a bit darker than average.

▶ *Surroundings are another factor*

But let's get back to par. And let's assume our group leaves its setting of green grass and moves onto white sand where sunlight plays fully upon them and is reflected back from all sides. Here's a scene that's a lot brighter than average. If an allowance of half a lens opening was right for a somewhat brighter-than-average shot, what additional allowance do you think would be right now? If your guess is another half-stop smaller, you're right again—as exposure guides agree in their terse yet adequate phrase, "Light Sand or Snow . . . 11."

We doubt you'll ever encounter subjects brighter than this—scenes in the tropics or semitropics included. For sunlight is no brighter near the equator than it is, for example, in New England, even though temperatures may be markedly different. Exposure distinctions to the south are prompted, not by the brightness of *light,* but by the frequent added brightness of *subjects.* Clothing is usually of a lighter color in warm climates. So, in many instances, are buildings and back-

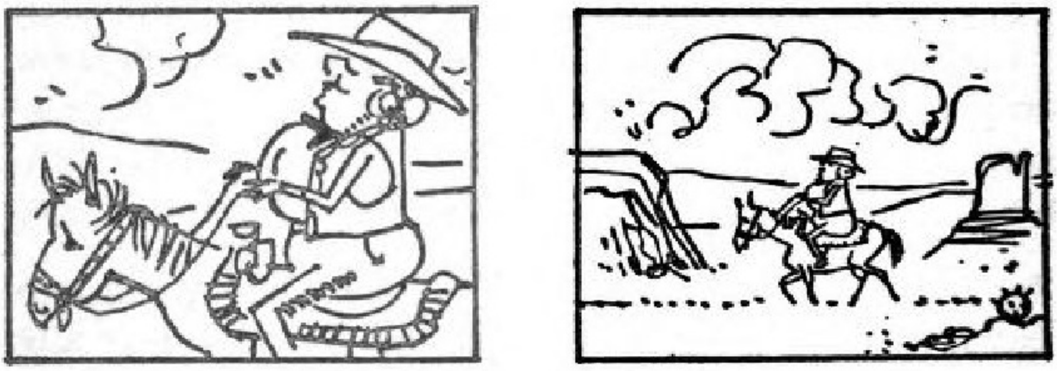
amera's lens - control
o the film . The 11 opening
e most important factors
par . Your somewhat -
r it ? It most cer- tainly
.
lays fully upon them and is
for a somewhat brighter -
ou're right again — as
ter near the equator than it
prompted , not by the
o , in many instances , are

ies . Film exposure , however
tastes in color reproduction .
at- tractive when it's
become even richer -and

of bright , open areas , it's

a direct bearing upon the size
ng an open - sky scenic , it's
midway between 8 and 11 -
wa- ter or distant mountains .

grounds. There may be less green grass and more light sand or light-reflecting water; fewer shady patches and more open skies. Film exposure, however, is judged just as it would be for similar subjects anywhere—and for the same reasons. There is also the factor of individual tastes in color reproduction. A brilliant scene, properly exposed, will still be brilliant on film. To some picturemakers, such a scene becomes even more attractive when it's purposely darkened a little by closing down the camera's eye half a lens opening more than usual so that areas of rich coloring become even richer —and there's nothing at all wrong with the idea either, if this is your preference.



Camera-to-subject distance has no direct bearing on exposure in outdoor pictures. But since distant shots often include lots of bright, open areas, it's wise to close the lens down to between 8 and 11. For close-up pictures of the same subject, leave the lens set at 8.

One aspect of exposure that's been the cause of some misunderstanding is the belief that the distance of subjects, in itself, has a direct bearing upon the size of lens openings. It hasn't, really. While it's true that you'd use a somewhat smaller-than-average lens opening when filming an open-sky scenic, it's because quite a bit of the picture area will inevitably be devoted to bright sky and clouds. Half a lens-opening reduction—to midway between 8 and 11—would be right for a sun-swept glimpse of green countryside. A full lens-opening reduction—to 11—for shadeless plains, or water or distant mountains. Yet, equally true is the fact that you'd use 8 in sunlight for a close-up of an individual of average coloring, halfway between 8 and 11 for one of a blond-haired individual with a fair complexion and, for that matter, midway between 8 and 5.6 for a close-up of someone of swarthy appearance. Good exposure—always—is simply good sense!

▶ *Shooting out of the sun on sunny days*

We've been talking so far about subjects on sunny days, and about those in direct sunlight playing upon them from pretty much the same angle as that at which the camera is trained. But how about pictures in the shade, or of subjects in the sun but side or back lighted? Exposure guides, you'll find, cover these situations, too.

Sometimes you have no choice when filming shaded subjects—it's shoot in the shade or not at all. Sometimes you have a choice—and frequently a good one, especially for close-ups of people, is to suggest an out-of-the-sun location that will eliminate the burnt-hole-in-a-blanket effect about the eyes which is born of harsh overhead lighting. But make the location open shade, and not deep shade, so they'll get the benefit of plenty of light from blue skies. Exposure guides now suggest quite a jump in lens adjustment—all the way from the par of 8 to a much wider 2.8 or 2.7. The reason is that there's no sunlight at all on your subjects, and sunlight is far, far brighter than skylight alone.

Shooting in deep shade—in woods, on porches—is something else again. Now shooting becomes a bit "iffy." There's absolutely no sunlight, and little or no skylight. Things, therefore, may be not only too dim for good color but too dark for moviemaking at all. This, indeed, would be a good opportunity for the counsel of a properly used exposure meter—about which more shortly. Such scenes are certainly a lot darker than those in open shade. But the recommendations for those, remember, were for perfect exposure. Now, having no choice but to gamble a bit or miss the picture, you may be willing to settle for less than

that matter , midway
he same angle as that at
e guides , you'll find , cover
ce - and frequently a good
blanket effect about the
of plenty of light from blue
The rea- son is that there's
tely no sunlight , and little or
uld be a good opportunity
e in open shade . But the
picture , you may be willing

ı you probably won't want to
:n though there's little or no
ẽw sun - patched areas go a bit

›ut in the open but only partly
keeping the sun at your back !
: lighted , the average subject
›u open up the camera's eye a
:d subjects - which may at first
me sun- lit areas . You'll
;et good color contrast . A back
r nothing in sunlight in the

perfection. If your camera's lens will open to 1.9 or 1.6, better do it. Yet with things for the first time being a little uncertain you probably won't want to use too much film in your shots. Sometimes, of course, a few shafts of clear sunlight will penetrate overhead branches, even though there's little or no light from the blue sky. For general views under this condition, it's usually best once more to open the lens wide, even if a few sun-patched areas go a bit "over." For close-ups of objects right in one of those sunlit patches, 4 is a good bet.

▶ *Side and back lighting*

You probably won't be making many movies in deep shade. It's lots more likely that you'll want to shoot subjects which are out in the open but only partly lighted by direct sunlight—and there's no need, when using Kodachrome Film, to follow that time-worn formula of always keeping the sun at your back! In fact, there are good and frequent reasons for not doing so. Things can look a little flat when fully front lighted. When side lighted, the average subject acquires greater attractiveness and depth, although it's not reflecting as much light as normally. Exposure guides suggest you open up the camera's eye a half stop for side-lighted targets—to midway between 8 and 5.6. They also propose the same exposure for most back-lighted subjects—which may at first seem a little strange. But what they have in mind here are subjects filmed at average distances in which there will still be some sunlit areas. You'll usually want to base your exposure on these brighter areas, even if the darker ones go a little "under," for this is how you get good color contrast. A back-lighted close-up, however, is a different matter—as most exposure guides point out. Now, being in close, you've little or nothing in sunlight in the picture area. You want your exposure right for the nearby shadowed subject, and the guides properly propose a full lens-

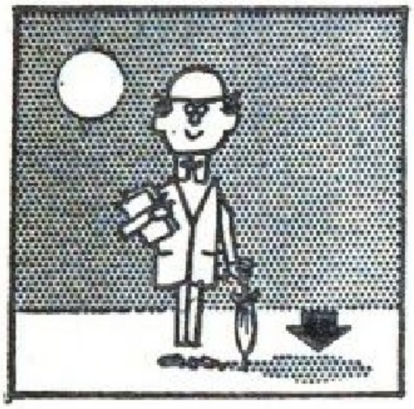
petals or of shimmering fall

opening allowance, from 8 to 5.6. Prime examples of this type of subject are intimate views of people, of translucent flower petals or of shimmering fall foliage.

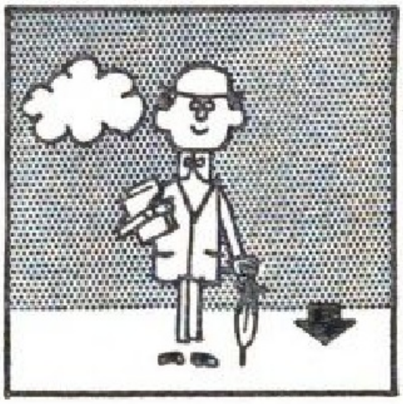
vay .

ıdows . " Yet , such lighting

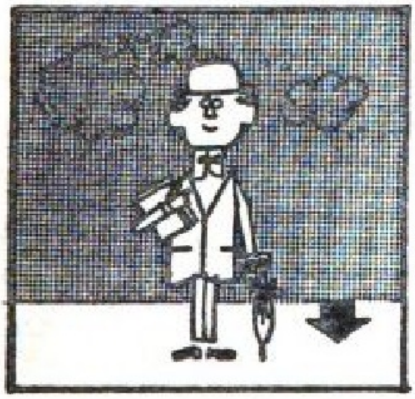
▶ *Shooting when there's no true sunlight*



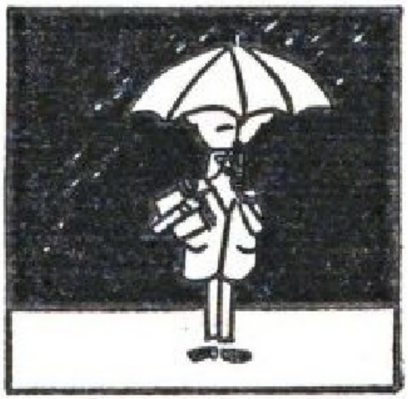
When the sun is out and shadows are strong, set the lens at 8.



On hazy-bright days, the shadows disappear; set the lens at 5.6.



With the sun completely behind clouds, shoot at 4.



Now things are really dark, so shoot at 2.8 or 1.9.

Not all movie opportunities occur, nor are all good movies made, on sunny days! And exposure guides continue to point the way.

The closest thing to clear, unclouded sunlight is that on a hazy-bright day. The guides describe it as "Hazy Sun . . . Indistinct Shadows." Yet, such lighting is pretty bright at that—as you may have learned if you've acquired a somewhat surprising and thorough sunburn under those conditions. There's no direct sun, but there's still quite a bit of sunlight filtering through haze and ricocheting off millions of moisture particles. So, for average-bright subjects in such light, 5.6 is the ticket for most subjects out in the open, with the usual allowances being made for extra-bright or less-than-average-bright scenes. The factors of side or back lighting needn't be considered, as, there being no full sunlight, there are no true highlights or shadows.

Hazy-sun lighting is twice as effective as the next classification: "Cloudy-Bright . . . No Sun, No Shadows." You're familiar with this type of day—clear, beautiful, with cloud-studded blue skies—yet with the sun behind one of those clouds. This calls for 4 for subjects of average brightness.

Then there's the 2.8 or 2.7 Open-Shade condition we've already discussed. These openings can be used as well for our next type of light—"Cloudy Day." Not cloudy-bright. Not cloudy-dark, either. Just overcast, cloudy, no sun or skylight, yet still fairly bright. Finally, there are really dark days, rainy days, which require 1.9 or 1.6. Under the latter types of lighting, things won't be very brilliant or colorful to either you or your film. Nonetheless, Kodachrome will capture what color there is, and there's a special charm and softness to many subjects filmed under such conditions.

▶ *Shooting early—and shooting late*

All this, please realize, has been for shooting during normal daytime hours. There are other hours regarded by many as being "the prettiest times of the day." These are when, early and late, the sun filters through the earth's haze to tint all objects with ruddy tones. Colors become rich and warm. Shadows stream across landscapes and scenics acquire depth and contrast. No hard-and-fast exposure rules apply here because, even though the sun may seem fairly bright, its intensity is

millions of moisture particles .
eing made for extra - bright or
ht , there are no true highlights

niliar with this type of day -
f average brightness .

type of light- " Cloudy Day . "
ere are really dark days , rainy
your film . Nonetheless ,
ndi- tions .

g " the prettiest times of the
ome rich and warm . Shadows
en though the sun may seem

affected by its distance from the horizon and by the density of the horizon haze. Yet, "guesstimating" usually gives good results. Average subjects, directly in such sunlight, generally turn out just fine at 4. It's not likely that you'll overexpose, and, if you underexpose a bit, most scenes will merely seem to have been filmed a little earlier in the morning or a little later in the afternoon.

Now, if chapter space permitted, we'd come to those moments of the day when perhaps the most beautiful of all movies can be made. When you shoot, not *by* sunlight, but *at* it. When you make sunrise or sunset movies! This rich source of movie material, however, is well worth its own pages—and we'll get to them a few chapters from now.

Right now, we'd like to talk about exposure meters.

▶ *Where—and how—exposure meters can help*

For those who want moviemaking at its very simplest, exposure meters will usually come up with the right answers.

But note that word "usually." Both meter and camera manufacturers, as their instruction sheets indicate, readily admit that meters, alone, cannot and do not provide *all* the answers.

Meters do very well all by themselves with average-bright subjects in average-bright surroundings—which, of course, covers a great many movie opportunities. The batting average of meters is likewise high for situations of uniform light intensity where there are no very bright or very dark areas, such as of most subjects filmed under hazy or cloudy skies. This is where exposure estimation can be a little uncertain for the inexperienced or infrequent moviemaker. And then, of course, every moviemaker may at times forget to adjust his lens for light and brightness changes. But if he has a camera with a lens-coupled meter, it will automatically correct most of these oversights for him.

ts . Average subjects ,
nost scenes will merely
made . When you shoot , not
own pages - and we'll get
eters , alone , cannot and do
a great many movie
ght or very dark areas , such
ienced or infrequent
t if he has a camera with a

▶ *Where meters—alone—can't do it all*

Meters can't do the whole job by themselves when there is great lighting contrast. The reasons are very understandable. Most meters used at camera distance will scan just about the same area as you see in the camera finder and which the film sees through the lens. When things out front are quite bright, such as over sand or snow or in long-range scenics across countryside, plains or mountains, meters are inevitably affected by the brightest and sometimes predominating areas. If the only consideration is the correct exposure of these, meters will very likely indicate or set the lens to a suitably small opening. But, chances are, there's someone or something *on* that sand or snow for which correct exposure is of at least equal, if not more, importance. In scenics, the right exposure of the landscape is surely as important as that of the sky. Here, then, is one example of where you must understand both exposure meters and exposure itself!

A meter may very well propose a lens opening of 16 —or even smaller—for the most brilliant scenes. But, if you know exposure, you know that this is too small if, for example, your real objective is a group of picnickers on a summertime beach or of wintertime skiers in clothes of average coloring. Between 8 and 11 would be nearer the mark when such targets are close up and pretty much fill the viewfinder. When they are somewhat more distant and but part of the over-all scene, 11 would be about right.

Meters are somewhat less likely to be misled by less brilliant scenic vistas over grass and trees, or wide-open plains or mountains. But, because of bright skies, they'll still frequently propose a smaller lens opening—such as 16—than you really should use. In the case of normal countryside, the right exposure would probably be between 8 and 11—with 11 usually being right for somewhat lighter plains or distant mountains. Even on dark days when there's lots of overcast sky in your

t meters used at camera
ngs out front are quite bright ,
ed by the brightest and
set the lens to a suitably small
, if not more , im- portance .
e you must understand both

re , you know that this is too
of average coloring .
e some- what more distant and

ntains . But , because of
mal countryside , the right
Even on dark days when

shots, meters will tend to underexpose still darker foregrounds, unless you make allowances.

What's the answer? To know exposure—and to know your meter as well!

When things surrounding your true target tend to throw your meter off, the trick is to step forward, if you can, and take a close-up reading of your real objective with your meter. Then set your lens to that . . . step back . . . and fire away. Or, from shooting position, you can take a reading of some object of comparable brilliance to your real target—perhaps the back of your own hand or a coat sleeve. For a scenic, you can use the grass at your feet. You can set your lens to these before sighting and shooting distant vistas and their bright sky and clouds.

▶ *When things are extra-dim*

Here, too, a meter's normal readings may require some interpretation.

For example—take a rainy day, with a happy youngster having the time of his life splashing about in a side-lawn "lake." An independent meter, looking at the over-all grayness of the scene, may very well say, "No pictures!" The full scene may be too dark for good exposure no matter how wide you might open the lens, but chances are you don't give a hang about the background of the shot. The boy is the important thing—and he's a bit brighter than the rain-drenched grass and shrubs. So, understanding exposure and exposure meters, you know you can capture him at 1.9, or you move in close to him and take a meter reading that will probably tell you this. Somewhat the same could be true of a dark- or rainy-day view of city streets. People, pavements and buildings may indeed be too dim for good exposure, but not street, store and car lights turned on to offset overcast skies—not colorful advertising signs. You can't very well take an accurate meter reading here, either. But you can shoot at 2.7 or 2.8 on a fairly dark day, or at 1.9 or 1.6 on one that's really dark.

- up reading of your real ob-

your real target - perhaps
ore sighting and shooting

n independent meter ,
posure no matter how wide
- and he's a bit brighter than
, or you move in close to
f city streets . People ,
ast skies - not colorful
ark day , or at 1.9 or 1.6 on

▶ *Meters themselves vary*

All meters and metered cameras are not of uniform design and operation. Some meters, built-in meters, scan a smaller area than do camera finder and lens, and are thus less susceptible to extra-bright or extra-dark areas surrounding your true objective. Others are designed to scan at a downwards angle, and therefore see less of brilliant backgrounds.

With some lens-coupled meters, you can, when you need to, throw out the meter's "clutch," so to speak, and make needed adjustments. With some, you can't—the meter's going to set the lens or know why. Yet some of these cameras operate by the exposure-index system. Each film, depending upon its speed, has its own exposure-index number. For Kodachrome Film this is 10 and, on cameras so equipped, the exposure-index control is set so that the meter will adjust the lens by this exposure-index rating. When you know that a meter, because of unusual conditions, will set the lens to too small or too large an opening, the cure is to adjust the exposure-index dial to a faster or slower rating. Obviously, the first step of a metered-camera owner is to read and understand the instructions that accompany it.

But enough about meters—now. We'll get back to them, and to exposure as well, when we come to nighttime moviemaking in later chapters. At this point, let's just agree that meters are very frequently an exposure convenience, but are not by themselves an exposure cure-all. *You're* still the one who decides both the whats and the hows of your moviemaking. And, as far as exposure's concerned, for sunlit subjects there's no reason under the sun why you can't do the job superbly well with, or without, an exposure meter!

▶ *When you speed up—open up*

Let's consider one last aspect of exposure—that for special-speed shooting, if your camera's so equipped. Standard-speed filming, as you know, is at the rate of

than do camera finder and
scan at a downwards angle ,
adjustments . With some ,
ch film , depending upon its
dex control is set so that the
t the lens to too small or too
tered - camera owner is to
n later chapters . At this point
u're still the one who decides
under the sun why you can't
l filming , as you know , is at

16 frames per second. If you set your camera to run at, let's say, 24 frames per second, the film will be moving past the lens half again as fast as at the 16-frame rate, twice as fast if set for 32 frames per second, three times as fast at 48 frames per second and at 64 frames, four times normal speed. Such faster looks at subjects obviously call for compensating adjustments in the size of the lens opening. These are just what you'd think they'd be: half a lens opening wider for 24 frames per second; a full lens-opening allowance for 32-frame shooting; a stop and a half wider for 48-frame speed; and a two-lens-opening adjustment for 64-frame filming. Or, in terms of variation from par, from 8 to 8-5.6, to 5.6, to 5.6-4, to 4.

A fair question here, of course, is why use, or even want to use, these nonstandard shooting speeds.

Normal filming speed, as you know, produces normally paced action on your screen. Yet, you may sometimes want to slow things down. To slow them down for viewing, you speed them up when shooting—for, obviously, if your camera runs the film faster, there'll be less action on every film frame. With less action on every frame, things will therefore slow down on the screen.

One good reason for slowing things down is so you can see them better. A waterfall, for example—it's a fascinating subject to watch, and to shoot and show, at normal speed. But it's even more eye catching if you can slow down its pace a little through 24- or 32-frame-per-second filming so that viewers can better distinguish its many arching drops and rivulets. Less than normal action in your filming can also help to steady jumpy subjects. In a vacation reel, for example, you might want to make a shot or two through the car's windshield as you bowl along a smooth stretch of road. There's no reason in the world why you shouldn't, either—if the car's windshield is clean, and if you hold your camera high enough so that its lens, as well as its finder, clears the instrument panel and "sees" through

half again as fast as at the 16
imes normal speed . Such
hink they'd be : half a lens
18- frame speed ; and a two -

w things down . To slow
s action on every film frame .

watch , and to shoot and
second filming so that
teady jumpy subjects . In a
etch of road . There's no
it its lens , as well as its

r 32 frames .

action , which is often too
dends , even beyond those

, adjust your exposure and
er pounding one off the tee , a
or skis . Slow - motion
r special moments to give

the windshield. There will still be some vibration in the shot—which you can help smooth out on the screen by shooting at 24 or 32 frames.

▶ *Sports—the top slow-motion opportunity*

Speed is frequently both the attraction and the handicap of many sports events, for much of their allure is in the grace of their action, which is often too fast for the eye to catch. Shoot in slow motion, however, and you and your movie audiences will share extra enjoyment dividends, even beyond those you could experience at the events themselves.

There's no trick to shooting in slow motion, if your camera's equipped to do it. You simply set the control for the proper speed, adjust your exposure and sight in on the soaring skier or diver, the hurdler or jumper, the front runners in a field event as they approach the tape, a golfer pounding one off the tee, a gridiron scatback circling the end or, a more familiar and perhaps less graceful subject, a youngster on his first roller skates or skis. Slow-motion shooting, of course, is for the highlights. You'll want to relate most of any story at normal tempo, saving this special effect for special moments to give your film narrative added impact.

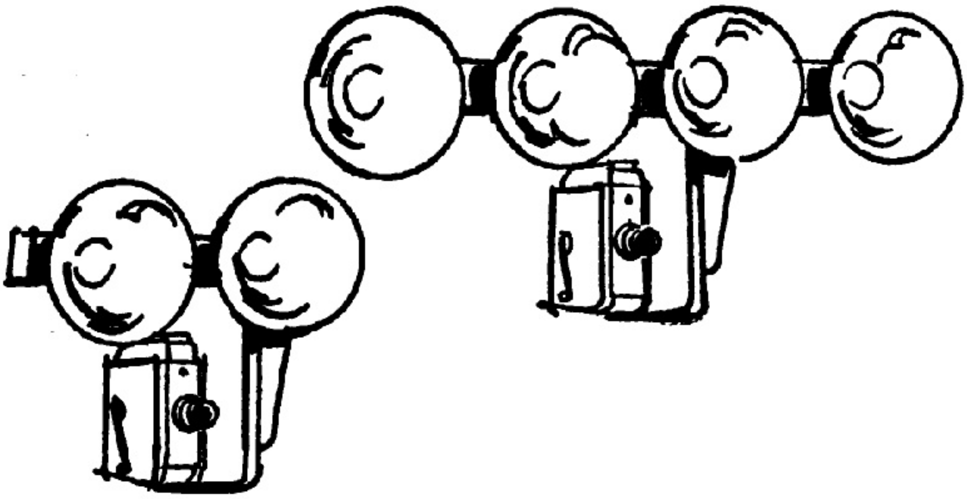
creen . Although we've

CHAPTER 6

novies , and this inexpensive
r movies are even easier to

▶ *Shooting Movies in Your Home*

At the start of this book we said that all that is really necessary for enjoying home movies is a camera, film, projector and screen. Although we've mentioned several helpful aids since then, these four do, indeed, fit you to shoot and show just about everything under the sun.



Indoor movies are no trick at all with a movie light bar.

At the outset, though, we were tempted to add a fifth item to the quartet—a movie light bar! Home is the place to make home movies, and this inexpensive accessory exactly doubles your filming range by opening up this whole wonderful world of movie opportunities. *And indoor movies are even easier to make than those you've shot outdoors.*

Tall talk? Then let the following paragraph decide!

▶ *Indoor light—a known and constant factor*

A movie light bar, in effect, is simply your sun at the end of a light cord. Here's your ready illumination—any time you press a switch. The light bar holds both lights and camera. Aim the camera—you've aimed the lights, too. Swing to follow indoor action as you see it in the camera finder—the light plays right along.

Every bit as simple as the use of a light bar is the estimation of indoor exposure with one. For now you needn't give a thought to clouds, or shade or time of day. Your illumination is of known and established potency. Every movie-camera lens is plenty fast enough for making indoor pictures. The size of the lens opening you use is determined by the distance of the lights from your subject—because photofloods, like other lamps, deliver more light to a nearby subject than they do to a distant one. Just which lens opening you use is all spelled out by simple instructions packed with your film and printed right on the light bar. At a 3-foot distance, you use one specified opening. At 4 feet, 6 feet, 9 feet or 13 feet, you use different and of course wider openings. You don't have to measure light distance either. Good guesses are good enough! If you have one of the completely automatic cameras we spoke of, with a built-in exposure meter that adjusts the camera's lens, you don't have to set anything!

Frankly—could anything be easier than this?

And think of what such filming freedom can mean to you. Your home—right *in* your home—is the focal point of most family activities. Here is where the new baby is bathed and powdered, dressed and fed, played with and admired. Here, more than likely, is where he will attempt his very first steps and blow out the candle on his first birthday cake. Here is where big days, such as Thanksgiving and Christmas, are celebrated. Here is where friends and family come to visit, and here is where most parties are held for both the younger and older generations. Here, too, is where everyday doings, surely a vital part of every family film

a switch . The light bar
camera finder - the light

to clouds , or shade or time
door pictures . The size of the
eliver more light to a nearby
film and printed right on the
course wider openings . You
ras we spoke of , with a built

tivities . Here is where the
mpt his very first steps and
. Here is where friends and
ev- eryday doings , surely a

diary, constantly prompt you to reach for your movie camera. And why not? You can shoot in seconds—if your camera's ready-loaded and secured to a movie light bar!

▶ *No question about the film to use*

Kodachrome Film, Type A, is the choice because it's color balanced for the specific type of light produced by photoflood lamps. While these, by comparison with the yellow light of ordinary household lamps, may seem to produce white light, it's still not the blue-white light of sun and sky. Daylight Type Kodachrome just won't do. Hence *always* use Type A indoors when filming under artificial light. As we've explained earlier in this book, you can also use this film outdoors, and with equal effectiveness, by color balancing it with a low-cost daylight filter.

▶ *Movie lights—easy to buy and to use*

A movie light bar is merely a wired device to hold both lamps and camera, and it's fitted with a generous-length connecting cord for plugging into any convenient light receptacle. A few dollars buy it. The lamps themselves, known as reflector-type flood lamps, are a combination of light and reflector and individually produce 375 watts of illumination. They're also very modest in price. Most light bars take two or four of them. With two, you can shoot as far away as 9 feet at 2.7 or 2.8, or 13 feet at 1.9. With four lamps, you can move back to 13 feet at 2.7 or 2.8—and to 18 feet at 1.9. And yet, while reflector-type photofloods are indeed bright, they are not "blinding"—proof of which is apparent because most indoor movies are probably filmed at the mid-wide lens opening of 4, and 4 is for light only one-quarter as bright as the 8 used for sunlight. Floods are certainly far more brilliant than subdued room lighting. People will squint and blink at them if you turn these lamps directly on them before their

- loaded and secured to a

s . While these , by
ght of sun and sky . Daylight
- lier in this book , you can

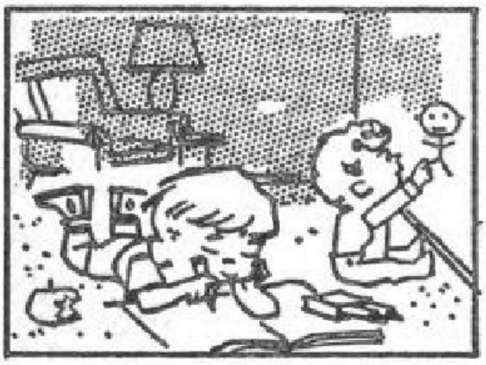
rd for plugging into any
nation of light and reflector
n . With two , you can shoot
et at 1.9 . And yet , while
es are probably filmed at the
nore brilliant than subdued

›o properly term them safe to
' will not shatter in use . A
while lighted . While not as
›ome of their effectiveness .
open a whole lens opening
›m when they begin to go off

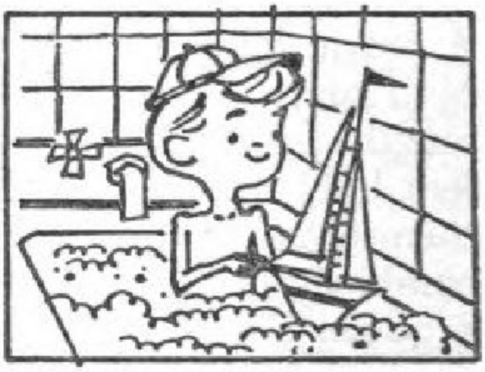
eyes have had a chance to adjust, but not if you first play them on wall or ceiling for a little while. Floodlamp makers can also properly term them safe to use from a wiring viewpoint. Four or fewer will not overtax a normal household lighting circuit. Unless you drop them, they will not shatter in use. A word of caution must be added here. They will break, and understandably, if they are somehow spattered with cold water while lighted. While not as long-lived as ordinary bulbs, floods will last for hours of moviemaking. Yet, they will, in time, tend to darken and lose some of their effectiveness. You could compensate for this by using slightly wider lens openings than those originally recommended. When they look dark, open a whole lens opening wider—use *f*/2.8 instead of *f*/4. But, because the lamps are so inexpensive, a better plan, we think, is to simply replace them when they begin to go off color.

he distance of lights from
proposals are based upon

▶ *Subject brightness counts, too*



This is an average scene—nothing extra-light or extra-dark—so follow the exposure recommendations on the light bar.



Small, light-colored rooms reflect a lot of light—so close down to a full lens opening smaller than you would normally use.

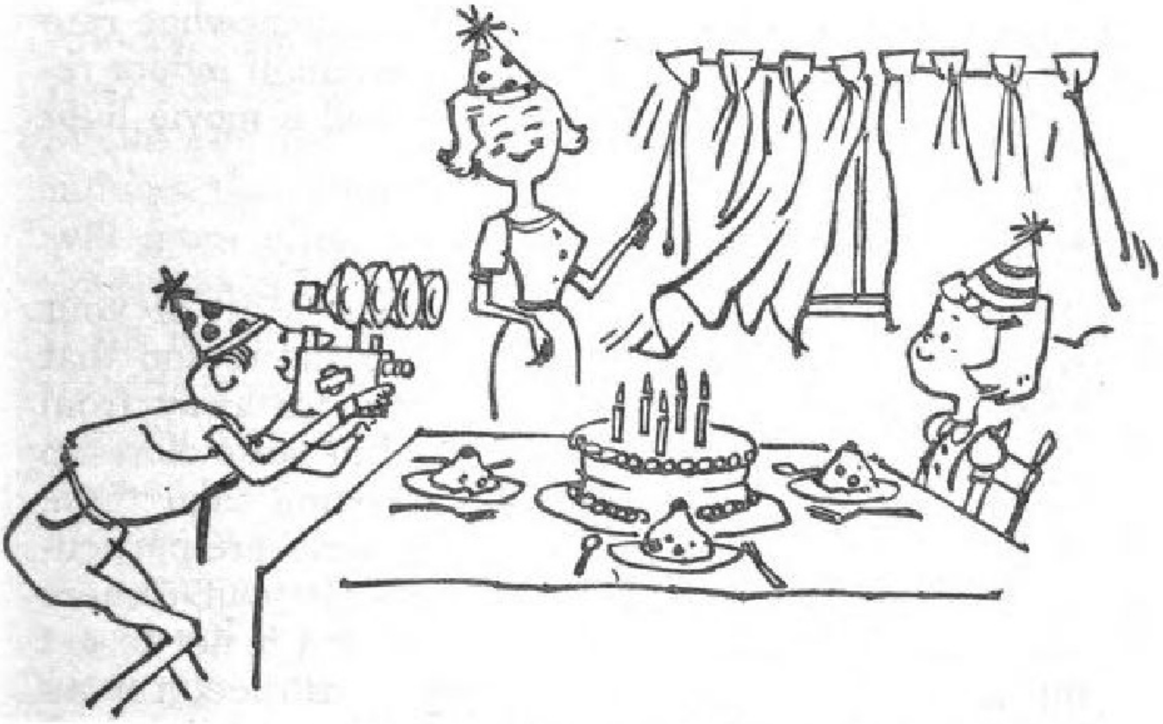
Just as for outdoor filming, minor departures from standard exposure suggestions will at times be necessary indoors. While the distance of lights from subjects is indeed the major exposure yardstick, the brilliance of subjects themselves is a consideration. Indoor lens-opening proposals are based upon subjects of average brightness—such as will be most of the shots you'll

, and things become brighter
n f / 4 and f / 5.6 . When you
. Now you'll want to close
ıs . Windows and mirrors
:ll you quickly enough when
.ılor results under flood

make in your living room. Move into the kitchen where more light is reflected by lighter walls, ceiling and even room fixtures, and things become brighter. About half a lens opening smaller than standard is the usual and adequate allowance—for example, move to halfway between *f*/4 and *f*/5.6. When you make movies of one of the youngsters splashing about in a white tub surrounded by white walls, things become a lot brighter. Now you'll want to close down a full lens opening from normal.

Although not quite under the heading of exposure, there's another item to keep in mind when making movies indoors—reflections. Windows and mirrors are the surfaces for which to watch. With both lights and camera sighted from the same position, the camera viewfinder will tell you quickly enough when the light of floor lamps is bouncing back into the lens.

▶ *Don't mix your light!*



When you make indoor movies during the daytime, you may want to pull the curtains to keep out bluish-toned daylight.

Very definitely included in any discussion of indoor exposure is the reminder that you're shooting with film made to give fine color results under flood lamps.

When making indoor movies during daytime hours, therefore, you'll want to mask out all blue-white daylight by drawing the heavy curtains or lowering shades; otherwise, all objects at or near windows will acquire a pronounced and unflattering blue tinge. Yet, it would be unfair not to admit that attractive indoor movies can at times be made under daylight illumination alone. Either Daylight Kodachrome or Type A filtered for daylight is now the proper formula—and without the aid of reflector-type floods. Your subjects should be close to windows, in strong, bright light if not in actual sunlight. The estimation of exposure, however, is pretty much anybody's guess. If your targets are by a window and in sunlight—and you're shooting from a position on their sunny sides—about 5.6 ought to do it. If you're shooting from their shaded side, and they are strongly back lighted, with little or no real light on the side toward the camera, about 2.8 will usually provide the pleasing answer. Yet, movie opportunities such as these are both somewhat rare and something of a gamble. To be certain of indoor results, it's best to stay with Type A and a movie light bar!

▶ *Close—but not too close*

There's also this about indoor movies. Most of your shots will inevitably be close-ups for the reason that you simply can't, as a rule, get very far away from your subjects. This is all to the good because close-up shots are almost always more interesting than those made from a distance, and movie cameras are particularly well suited to making close-ups. If your camera has a fixed-focus lens, your only concern is not to get too close—and tables in the camera's instruction manual give you minimum distances for the various lens openings. If your camera's lens can be focused, you can, of course, move in even closer. Always, when filming at any of the wide lens apertures usually needed for indoor moviemaking, focus for your shooting distance!

e heavy curtains or lowering
fair not to admit that attractive
ylight is now the proper
t in actual sunlight . The
u're shooting from a position
ith little or no real light on the
somewhat rare and something

s a rule , get very far away
distance , and movie
o get too close - and tables in
ed , you can , of course ,
for your shooting distance !

ul in the home) and the
cts , as the jumpiness of
all means pivot to follow
ture an area beyond the
rock- steady shot . Then
the whole of which tells the

for rigid and unnatural
be seated and fairly still ,
've a chance for the most
ther , whipping up a cake in
nate , over - the - shoulder
s train set , or a little girl
or lowered , switches

In close-up shots, naturally, you won't be able to span much territory with your camera's lens (a wide-angle lens is *very* useful in the home) and the temptation to panoram may at times therefore be especially strong. But don't do it! You never want to panoram on nearby objects, as the jumpiness of subjects in a pan is increased in proportion to their nearness to the camera. If, however, your target moves across a room, by all means pivot to follow it with both camera and lights if you want to—since following action is not panoraming. But most times, when you want to capture an area beyond the limits of the action spanned by your camera's finder, swing your camera with your finger *off* the exposure button. Make another rock-steady shot. Then step to another position or distance and make another. Each shot, in effect, will be a phrase or sentence in a movie paragraph, the whole of which tells the complete movie story.

At all times remember that you're using a movie camera. Remind your subjects of this, if necessary—for there's never any need for rigid and unnatural posing. While you may well make more portrait-type shots indoors than outdoors because your indoor subjects will more often be seated and fairly still, they can nevertheless be normally busy at some activity—even if it's merely turning the pages of a book. More frequently you've a chance for the most natural family-activity movies of them all: the children, absorbed in toys or games; Dad, busy in his basement workshop; Mother, whipping up a cake in a colorful mixing bowl or basting a mouth-watering roast on the kitchen range. All are filmed both to show *them* and, in intimate, over-the-shoulder glimpses, what they're up to. In fact, complete and completely fascinating movies can be made of subjects such as a boy and his train set, or a little girl and her doll-house world. With the trains, for example, the camera can move in to within inches to show signals being raised or lowered, switches opening or closing and the flyer rocketing down the straightaway almost into the lens of a camera located near the curve at floor level.

There's one other thing about indoor movies—they may seem almost too good to be true. You may even, when you get your initial indoor roll back from processing, be afraid to thread it up for viewing. You needn't be. Chances are you'll find it the finest and most colorful film you've ever made!

▶ *The role of independent exposure meters indoors*

To be entirely frank, meters are not as useful for gauging exposure for indoor movies under flood lamps as they are for outdoor shooting. There are several reasons for this. The most important one, perhaps, is that it's so downright easy to just estimate light distance and to set your lens by this plan, making the occasional allowance necessary for extra-bright subjects. Meters, of course, can do about the same job for you—but no more efficiently. For, even with a meter, there will be allowances to be made. One reason is that, as you know, the effectiveness of light falls off sharply with distance. The important distance is that of your most important subjects—and it is for them that you want your exposure right even if more remote objects and areas are somewhat underexposed. Because an exposure meter, in all but extreme close-ups, will scan and "read" the brightness of both your real targets and their darker backgrounds, it may propose a wider lens opening than should be used. Inversely, while a smaller-than-normal opening is surely in order for most shots in kitchen or bath, a meter will often oversquint in such bright surroundings and suggest a lens opening that would underexpose your true targets.

There are other factors. With still cameras, pictures can usually be made indoors without flood lamps by setting snapshot cameras for shooting at very slow shutter speeds or even for bulb or time exposures. But you're making *movies*. You want to record action, not

(Continued on page 125)

ıl indoor roll back from
ou've ever made !
oor movies under flood
wnright easy to just
Meters , of course , can do
s that , as you know , the
or them that you want your
e close - ups , will scan
ld be used . Inversely ,
h bright surroundings and
as for shooting at very
on page 125)

scene , have someone

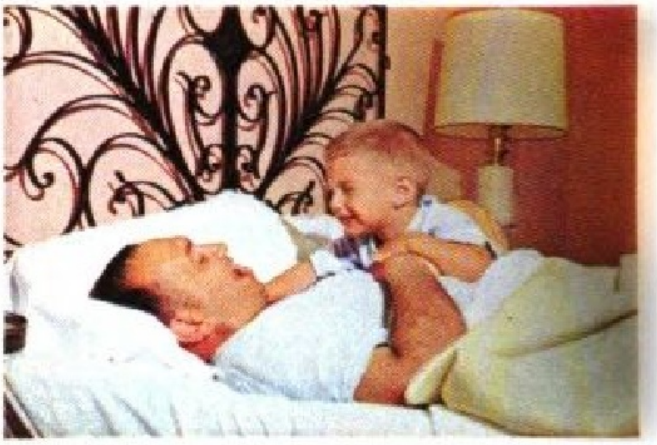
COLORFUL SUBJECTS MAKE COLORFUL MOVIES

We shouldn't have to mention it—but if you want colorful movies, you'll have to shoot colorful subjects. To put action into a static scene, have someone walk into the picture and pause, sit down or perform some other logical action.

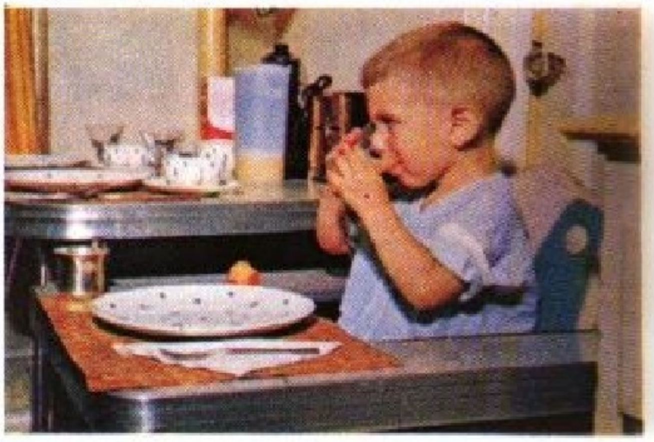
a very short time . Here are

THIS IS YOUR LIFE

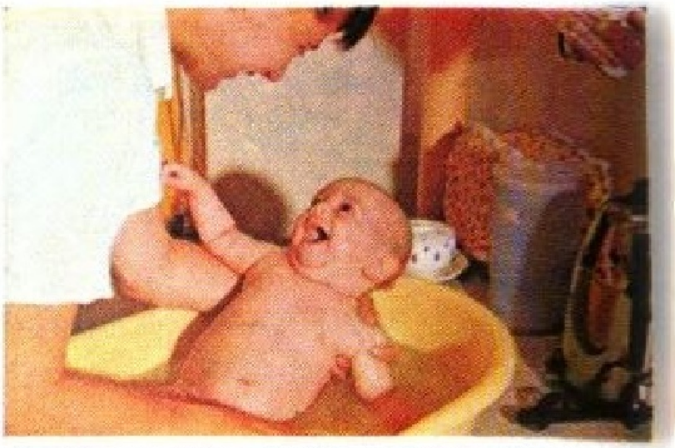
In your search for good movie subjects, don't overlook a day in the life of your own family. Such a film becomes priceless in a very short time. Here are a few pictures to show how such a story might start. You should be able to supply the ending with no trouble.



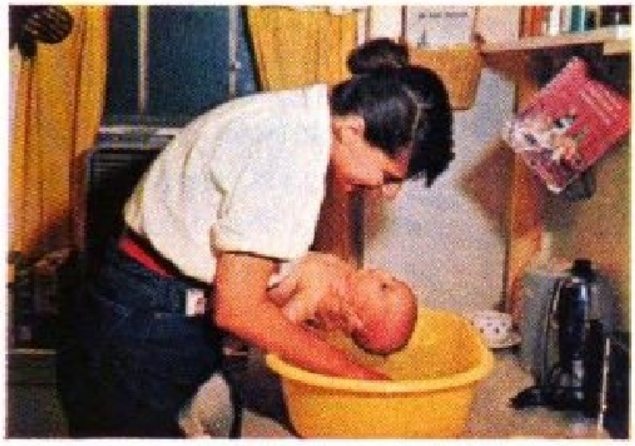
1. The day starts early when Tommy goes bounding in on Daddy's stomach.



2. A man needs his coffee first thing in the morning—and a boy needs his orange juice!



3. Meanwhile, little brother Douglas starts the day off with a dip—



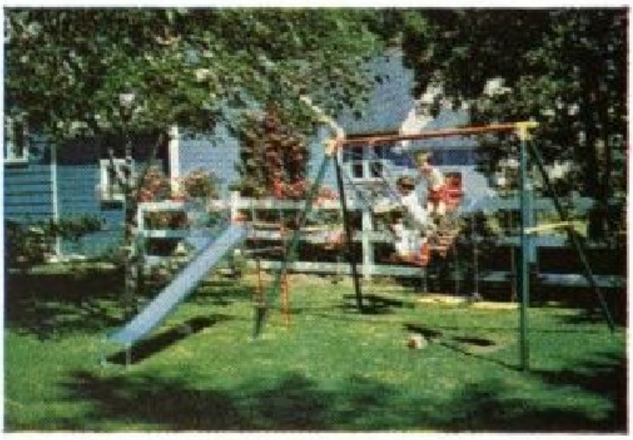
4. —in the bathtub, that is. He doesn't mind this at all.

5. But that darn powder gets in a guy's hair—and everywhere else when you're dressed like this.

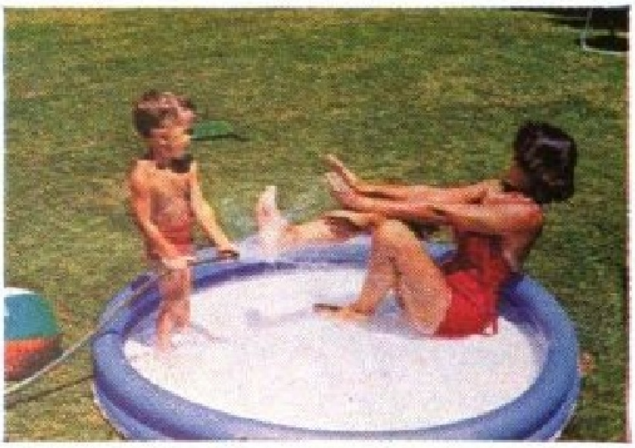
6. A bottle helps him forget the inconveniences of being very young. (And so on. *You* finish the story—it's your life!)

MOVIES *MOVE!*

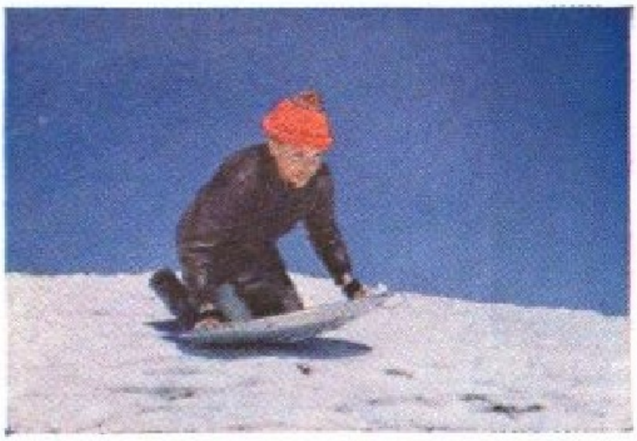
Movies aren't just a series of animated snapshots. Movies move! And there's plenty of action when kids are around.



No. 1. Good action, but a cluttered, "busy" background.



No. 2. You can beat bad backgrounds by shooting from a high viewpoint, like this . . .

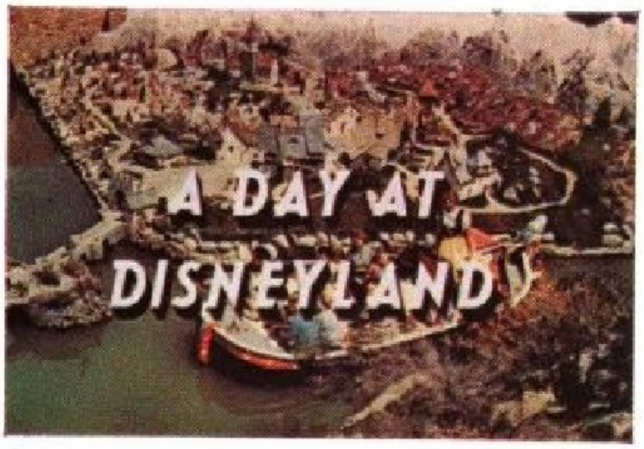


No. 3. . . . or from a low viewpoint, like this.

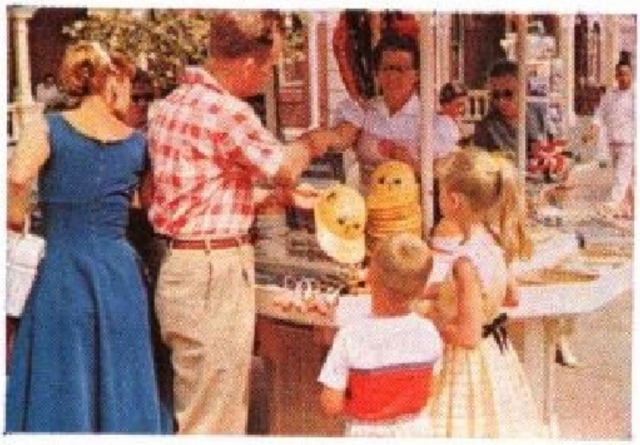
ou always see the whole
nake a story out of almost

THE CAMERA TELLS A STORY

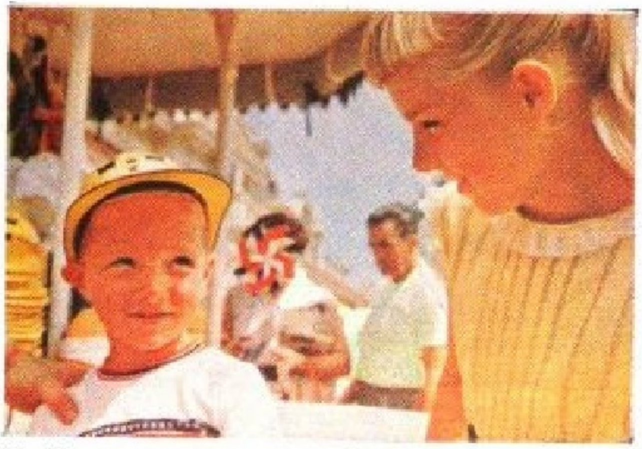
Movies are made to tell stories. It's fine to carry a bunch of unrelated snapshots in your wallet, but movies run continuously. You always see the whole thing, and in the same order. So try to make your movies tell a story. A little judicious editing (see Chapter 13) can usually make a story out of almost any footage. But it's lots easier if you *plan* on a story before shooting. Here's how one might be done.



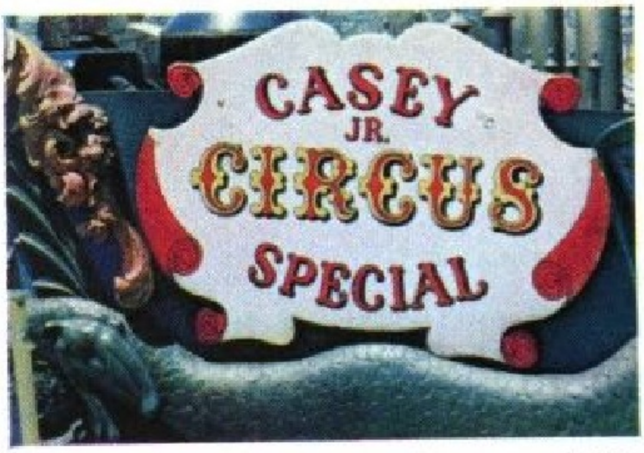
1. Every story starts with a title so the audience knows what's coming. (Chapter 13 tells how to make titles.)



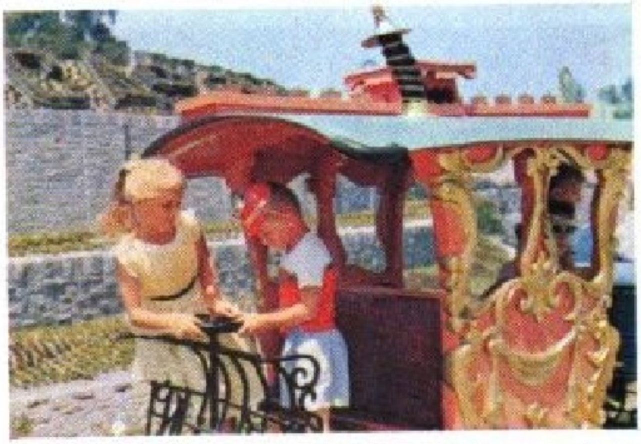
2. The first thing we did was to buy some authentic headgear.



3. Pretty snazzy, huh Sis?


CASEY
JR.
CIRCUS
SPECIAL

4. Well, there's Casey Jones and his steam calliope. (This is a good example of a natural title.)



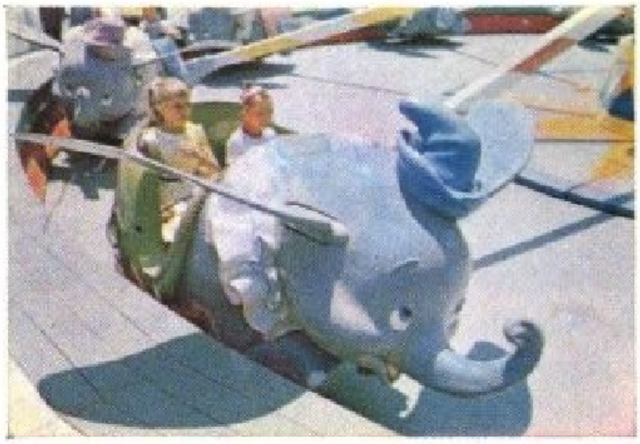
5. And here we go! The ride was lots of fun.

6. We even went through a tunnel "carved" out of solid rock.

7. All this railroading made us pretty hungry and thirsty.

8. But a big, juicy hamburger . . .

9. . . . and some ice-cold soft drinks put us back in shape again.



10. Now for an exciting ride aboard Dumbo, the flying elephant.

11. Naturally, this made us hungry again!

12. But soon the band came marching down the street, and we had to march toward the parking lot and home.

hoot is about 1/32 second .
vith them ! Yet , there's one
vs on a bright and sunny day

ng and colorful of all movie

(Continued from page 116)

stop it. Existing light exposure estimates by meters would be pointless since the standard speed at which most movie cameras shoot is about 1/32 second. It's therefore just about impossible to make nighttime in-the-home movies *without* photofloods. And it's so easy to make them *with* them! Yet, there's one indoor-movie occasion when a meter can really help. This is when you're using daylight film to shoot subjects close to windows on a bright and sunny day.

This chapter is not the end of nighttime movie opportunities. Beyond the walls of your home, there are some of the most exciting and colorful of all movie subjects. You'll find them discussed in Chapter 11, page 147. And *your* movie camera can capture all or most of them!

CHAPTER 7

Children—Finest Movie Subjects of Them All!

If one word could sum up children, that word would be "MOTION." For children, in all their waking hours, were never meant to be still!

And if there had to be but one reason for moviemaking, children—surely—would be it. Who can put a price on a color-and-action record of a baby's first steps, a first birthday, a first Christmas season? Or, a little later, a movie of a little girl's new doll or a boy's first bicycle? Big events like these in the lives of children, vastly exciting though they may be at the moment and year of their happening, become precious beyond calculation as time goes by.

How wonderful it is, then, that every movie camera is the ideal instrument with which to preserve a child's day-to-day development! For it *is* completely that—when the camera's always kept ready-loaded. Even indoors, with little more preparation than the pressing of a switch and with no need or reason to arrest the motion of a wide-eyed and bobbing head or of chubby and waving fists, you can capture every action and expression in a child's unfolding growth.

In the early years, usually, Mother can be the "cameraman," because big movie moments will not always wait for Dad and weekends. He is certainly the one

er meant to be still !
- action record of a baby's
le ? Big events like these in
d calculation as time goes by
elopment ! For it is
of a switch and with no need
and ex- pression in a child's
weekends . He is certainly

to make the very first films of the new baby in Mother's arms, close by a hospital window. (With the camera loaded for daylight filming, with Mother and baby in daylight, but not direct sunlight, with the lens set at 2.8 if the window light is fairly bright, and wider, if possible, if it's a little on the dim side.) Dad will probably shoot the home-coming, too—the big-eyed admiration of older brother or sister, the first feedings, the first baths. But then, most times, it can well be Mother's opportunity to take up the movie camera. And she can do it. *Of course* she can do it! Outdoors, on good days, the best site for moviemaking is in open shade where baby can ogle his new world, squint-free of full sunlight. Yet, most of the early movies will be made indoors where a movie light bar can supply the light easily and uniformly. And don't worry about the brightness of flood lamps. They're bright—yes—just bright enough for moviemaking. For example, when you're 9 feet away, they're no brighter than the shaded outdoor light that also calls for 2.8 filming. The trick is to play the lights on wall or ceiling for a minute or so until baby's eyes become accustomed to them, then gradually to lower the light bar until both lights and lens are playing on the youngster.

▶ *The best times to make movies of babies*

There are good and poor times for making baby pictures. The good times are during and after a bath, during and after feeding, when baby's just awakened and is rested from a nap. Even at this young age—although just *looking* at a baby is so very satisfying—give him something to do: a plaything to fumble for in his tub, powder to pat on his tummy after bathing, a toy to teethe on. And always remember that these are movies of his unfolding world. Make all possible shots at his eye level so that he can smile back at you, or at the toy you dangle, without uncomfortable effort. If he's on a blanket on the floor, operate your camera from

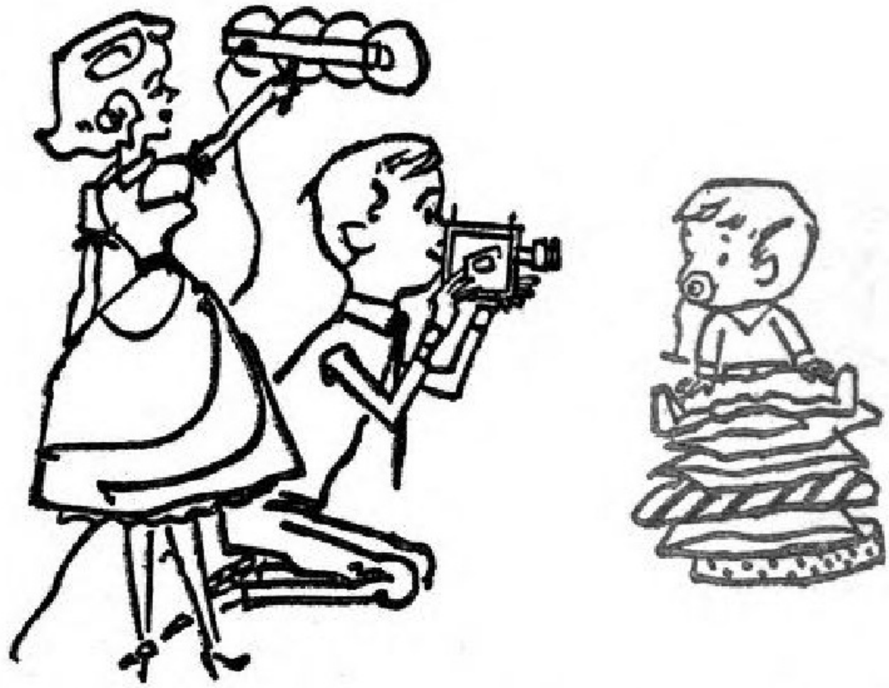
/light filming , with Mother
, if it's a little on the dim
lings , the first baths . But
: ! Outdoors , on good days ,
ie early movies will be
amps . They're bright - yes -
at also calls for 2.8 filming .
to lower the light bar until

g , when baby's just
ething to do : a plaything to
of his unfolding world .
. If he's on a blanket on the

on or near the floor. If he peers at you through the ribs of his crib, let your camera peer back at him from a vantage point of the same height rather than looking down at him. When he reaches w-a-y out through the bars of a playpen to clutch at a just-discarded toy, try especially for extreme close-ups of his chubby fingers and the concentration of his face. Your movie camera is uniquely gifted for close-range filming—and what greater pleasure from big-screen pictures than movies of a little child?

same height rather than
lly for extreme close - ups
at greater pleasure from big
ct
ar . Although the bar

▶ *How to make baby close-ups*



For extreme close-ups you can use the camera and lights independently. Remember to base exposure on the lamp-to-subject distance.

You won't always want to crowd in with a movie light indoors—and you don't really have to, even when using a movie light bar. Although the bar normally holds both lights and camera, it needn't. *You* can hold the camera as close as you can get, and you can get close indeed with a movie camera. Someone else can hold the lights further back, although not directly behind you. Your exposure, as ever, is based on light, not camera, distance!

When he forms one of those odd affections for objects so important to his early years—a much-chewed and beloved teddy bear, a faded-blue blanket—you'll surely want to preserve those childhood attachments. Then, sooner than you may expect, your baby will be "unching" himself across a room to get where and what he wants. Now you'll use camera and lights together again so that both can follow his progress. Then, one day, you can probably reach for your camera to record that first big milestone—*your baby's first steps.* He won't make it the very first time he pushes up to stand teetering and a little fearfully, before plumping back to the floor. This is no small movie moment, at that! Yet, one day, perhaps when Dad's across the room beckoning encouragement, he'll take off and, a few stumbles later, stagger the last few steps into those waiting arms.

Get *that* in color movies, and your camera will never shed its halo!

▶ *Film a child's diary as you'd write a child's diary*

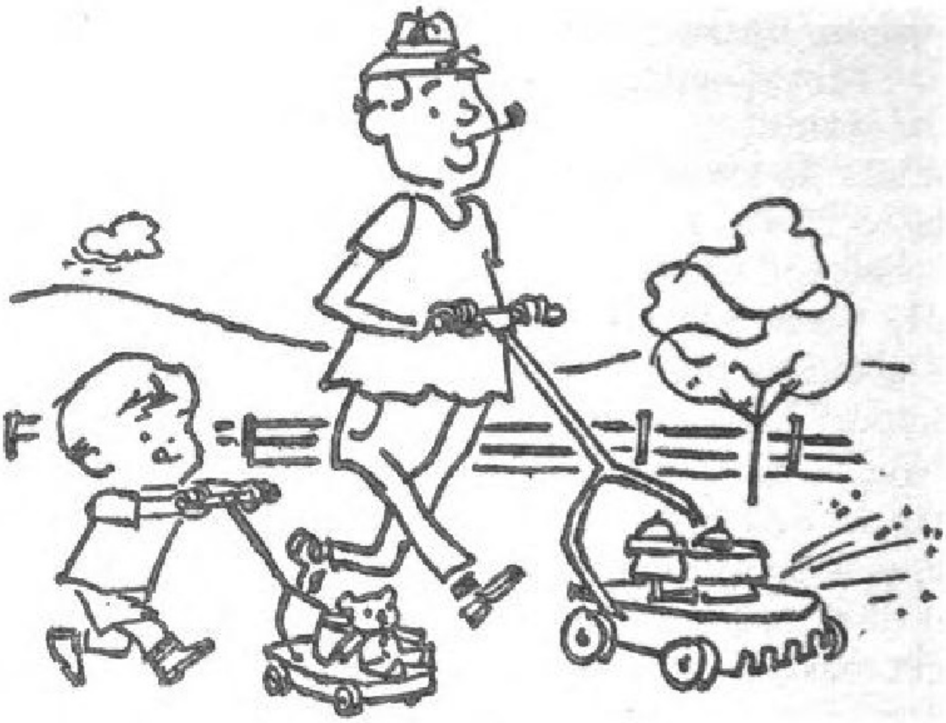
Growing-up movies, come to think of it, are made up of a series of "firsts," for most of which you'll never get a second chance: the first taste of a new food, first meeting with a new puppy, first uncertain clutching at Granddad's glasses, first holding of both baby and bottle by big brother or sister, first gentle splashing in his bath, first toe-testing of water at a beach or first mittened grabbing for elusive snow. Shoot all these in sequences, and not just in isolated shots—first, from well back, then move in closer and ever closer.

All too soon, however, babies become children. "Teddy" may still have to be there at naptime, but now wake-a-day moments are devoted to coloring books, a

as ever , is based on light ,
ar , a faded - blue blanket -
imself across a room to get
, you can probably reach
and teetering and a little
s the room beckoning
" for most of which you'll
glasses , first holding of
ened grabbing for elusive
ents are devoted to coloring

go and you certainly don't
. Children soon become
ivities , and , later , children

olor of those crinkly
ie material . When Dad
a- splashed and be - sudded
ing and pint - sized grass



trackless train, a shiny three-wheeler or even first skates or a doll house. Baby is growing up, but he still has a long way to go and you certainly don't want to miss a single stage of it! And you needn't! There's never any reason, in movies, for intruding on, or halting his play. Children soon become accustomed to a movie camera and regard it as an understanding observer and almost a participant in their very important activities, and, later, children love to see their world of make-believe become real on the family movie screen!

You won't want to miss birthday parties, cakes and games. You surely won't miss any of the Christmases and the wonder and color of those crinkly packages under the tree. Then, soon, *he'll* want to be with Dad, and *she* with Mom, and this development promises epic movie material. When Dad washes his car, your boy will want to wash his own knee-action station wagon. *Let him*, for the sake of your movie camera—splashed and be-sudded though he may get. When Dad gets out the power mower, his boy is sure to trudge along a few steps to the rear with his clattering and pint-sized grass clipper. When Mom mixes a cake, little-Mom will want to create temporary chaos with her

ith powder and lipstick
see and do , of course . But
e first " two - wheeler " -
of the car . Someday , too ,
me , your youngster will go
when your young hopeful can
g swim meet . Perhaps he or
nd at the same time reach
ur boy will be- come a
d then , together with a few

own mixing bowls and beater. And—just this once, please—turn your future deb loose at Mother's dressing table to pretty up with powder and lipstick while your movie camera looks over her shoulder!

▶ *More years—and more adventures*

Almost every month there are more "firsts"—the first visit to a zoo, a carnival, an amusement park. Show what the youngsters see and do, of course. But be no less sure that your movie camera catches their expressions as they experience each new wonder. Then there's always the first "two-wheeler"—and there, indeed, is a sequence to shoot, starting with a glimpse of the youngster's face as Dad hauls the bike from the back of the car. Someday, too, there'll probably be the first fishing trip—and the movie camera will certainly want to go along on *that*. Maybe, at about this time, your youngster will go to summer camp. There's packing, and there's parting, to the movie story of this event. There's also, usually, Parents' Day when your young hopeful can take you and your camera around to meet his tentmates, his counselor, the beach and the boathouses and maybe the holiday's big swim meet. Perhaps he or she will go into Scouting and, if so, probably you will too, to a degree. Here your movie camera can keep the family record and at the same time reach out a bit to cover community interests in which your youngster and your movies can play a proud and rewarding part. Maybe your boy will become a Little Leaguer—and here's more action for your camera and fine film fare for both family and friends.

Then, perhaps, your children will be away at school for a while. For this, you may be able to spare the camera every now and then, together with a few rolls of film. For this important period is also part of the growing-up story, and a part they surely won't want to be missed.

an the simplest snapshot

ack and forth !

By now, your child is easily ready for ***his own*** movie camera, which need cost little more to buy, and no more to operate, than the simplest snapshot camera.

Each child makes movies while away—and ***you*** make others at home—you'll all still be very much together if the films shuttle back and forth!

bright , average or dim
ght almost precisely as does

: it admits upon the film so

; , its lens images will
from the camera to those
st how close you can get to
our camera has a fixed -
pness .

CHAPTER
8

A Little More Lore About Lenses

We already know that the camera's lens is the eye of our movie camera, and that, like the human eye, it can be adjusted to see bright, average or dim objects almost equally well. With a lens-coupled exposure meter, in fact, and for many subjects, it automatically reacts to light almost precisely as does the iris of the human eye.

But this is only half of an eye's job. The other is to see things *sharply*. The camera's eye accomplishes this by focusing the light it admits upon the film so that images, in addition to being properly colored through correct exposure, are also satisfactorily crisp.

Here, moviemakers are singularly fortunate. For, if you hold your camera steady or move it but rarely and slowly in panorams, its lens images will always be remarkably sharp and have amazing "depth of field." This last simply means that objects ranging from a few feet from the camera to those clear out to the horizon will be almost equally crisp. Your camera manual, always good for frequent reading, will tell you just how close you can get to targets. And, especially if you slip a Kodak Portra Lens over your camera's standard lens, you can get very close indeed. If your camera has a fixed-focus lens, knowledge of its minimum shooting distance is the beginning and end of any concern over this matter of picture sharpness.

▶ *If your lens adjusts for focus*

If your camera's lens is of the focusing type, there's a bit more to the story. You can now either focus or not focus. You can adjust your lens to concentrate sharpness on subjects at any distance, and as close as mere inches and not just feet. Or you can set it so you can shoot just as with a fixed-focus lens.

A focusing lens, you see, has its own "universal-focus" distance which, as its manual will tell you, is probably something like 15 or 25 feet. It's not at all a bad idea to shoot this way for general filming, either. Also, when you want to concentrate sharpness and interest at one distance and on one plane, you can do it. Let's say your target is only 2 feet away, and you focus at this distance. With an 8mm camera, for example, and in good light, things from about 1½ to 3 feet will be nice and sharp, with detail falling off on objects nearer and farther away. Notice that phrase "good light." Just how close you can get and how deep the range of sharpness will be are determined by the brightness of light, and, therefore, by how small a lens opening you can use. Do you use glasses when you read these lines? Well, to see what a small lens opening can do, take off your glasses, if you will, stab a hole in a piece of paper with a pin, and then, with that hole very close to your eye, read these words. Sharp, eh?

Of course, most movie subjects won't be as close as 2 feet. Let's say your target is 10 feet away and you focus at 10 feet. As sharp-eyed movie-camera lenses are quite stubborn about relinquishing detail, your range of sharpness with an 8mm camera, and again in good light, will now be from about 3½ feet and right on out, and from about 5 to 100 feet with a 16mm camera. Still quite a bit of range, which you may not really want—but these figures also suggest that you can "focus-out" detail in unwanted areas by setting your lens for a distance other than that at which you're actually shooting. For an object 10 feet away, filmed from 10 feet away, you can set your lens for a 5-foot

ıst your lens to concentrate
with a fixed - focus lens .

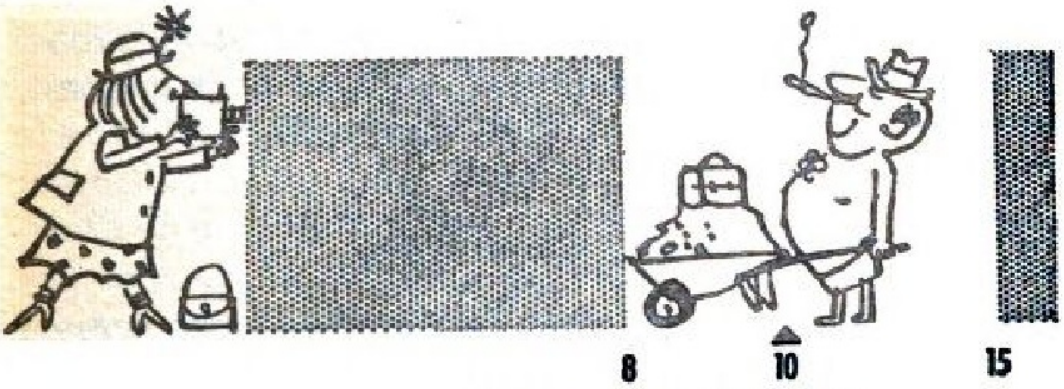
ke 15 or 25 feet . It's not at
distance and on one plane ,
in good light , things from
d light . " Just how close
ll a lens opening you can use
'ill , stab a hole in a piece

ıarp - eyed movie - camera
ll now be from about 3 %
ınt - but these figures also
ually shooting . For an

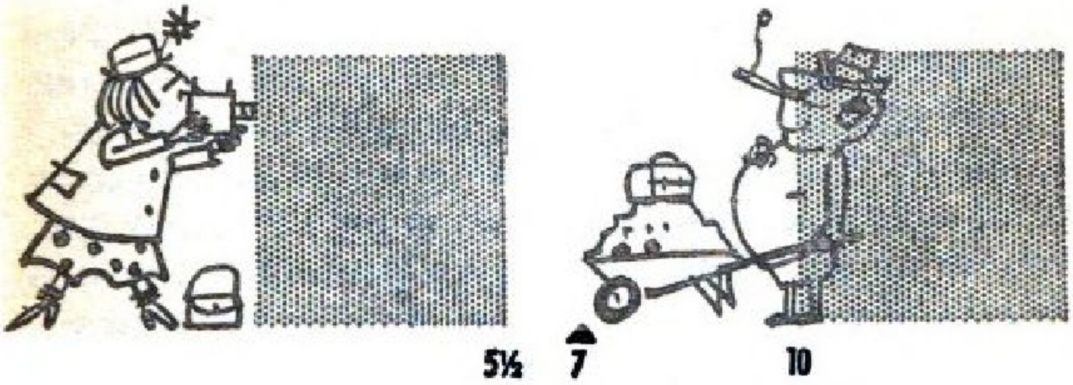
about 3½ to 10 feet . In
using out . "

focus. Now, with most 8mm cameras, the range of sharpness becomes from about 2½ to 50 feet, and with 16mm cameras from about 3½ to 10 feet. In dimmer light, however, requiring larger lens openings, the range of sharpness is reduced and you can do a far better job of "focusing out."

arp when you focus on 10
closer than 6 feet and
with a 16mm camera . But



CAMERA FOCUSED AT 10 FEET



CAMERA FOCUSED AT 7 FEET

The zone of sharp focus (called depth of field) gets narrower as you focus on closer subjects. This shows how much will be sharp when you focus on 10 feet and when you focus on 7 feet with a 16mm focusing camera.

Let's say correct exposure calls for a lens aperture of 2.8. Staying with our 10-foot example, and with a 10-foot focus, things closer than 6 feet and farther away than 30 feet will begin to "soften" with an 8mm camera, as would those closer than 8 feet and farther than 15 feet with a 16mm camera. But focus at 7 feet, while shooting at 10, and these ranges become 5 to 12 feet with an "Eight," and 5½ to 10 feet with a "Sixteen"! To make these calculations, you will find a depth-of-field computer in the Kodak Movie Photoguide.

These examples, of course, are unusual shooting situations and are given just to show something of what can be done with a focusing lens. In most of your moviemaking, with any kind of a lens, all you'll probably ask is that your movies, all parts of your movies, be sharp and detailed. And so they will!

▶ *Added range through an added lens*

The size of objects on your film and on your screen has a lot to do with how well you can see them and how much you'll enjoy them—which brings us to the subject of auxiliary lenses. With these, you can either span a wider-than-normal area or you can pinpoint smaller areas and targets.

Sometimes, of course, you can back up or move in on subjects so as to cover more or less than normal. Sometimes you can't, such as when you're making movies of a group in a small room, or when shooting a skyline on which you don't want to panoram or when filming a timid target that's pretty far away and intends to stay that way. If you're using a one-lens camera, and that lens cannot be interchanged, your recourse is to slip on a conversion lens which will change its view to either that of a wide-angle lens or that of a moderate-powered telephoto. At 10 feet, for example, the standard lens of an 8mm camera will span an area about 3½ feet wide. Put a wide-angle conversion lens over the standard lens and this field becomes about 7 feet wide. By contrast, at 25 feet the standard lens will cover an area about 8½ feet wide yet, when fitted with a telephoto converter, it will narrow the field to about 4 feet. These same effects are also obtainable with turret movie cameras equipped with swing-around wide-angle and telephoto conversion

lculations , you will find a
cusing lens . In most of your
ailed . And so they will !
hem - which brings us to the
targets .
such as when you're making
get that's pretty far away and
a conversion lens which
the standard lens of an 8mm
omes about 7 feet wide . By
will narrow the field to
d telephoto conversion

you won't use replacement

do show that conversion
gle lens or your choice of
ed in a turret camera and
cept them , there are
n mean !

wild game , or to give
ility , when used at
when mak- ing extreme
8 % inches wide , if it can
ches . A 3 - times
an that 82½ - inch area at
pulling things in . Imagine

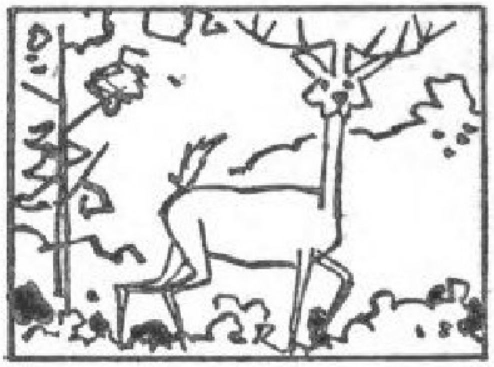
lenses. When it comes down to brass tacks, you will use these extra lenses a lot—and to good effect—if they are on a turret. But you won't use replacement lenses nearly so much.

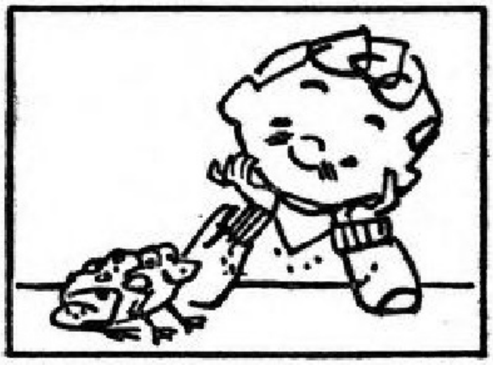
These, admittedly, are not particularly dramatic examples of what can be done with a wide-angle or telephoto lens, but they do show that conversion lenses are helpful and surely an inexpensive way to added shooting fun and range. Cameras taking an interchangeable wide-angle lens or your choice of telephoto lenses do a far more effective job. This is true whether they individually replace the camera's standard lens or are used in a turret camera and swung around to substitute for the standard lens. Such auxiliary lenses are usually focusing lenses. For most cameras which accept them, there are telephotos offering 1½-, 2-, 3- and 4-times magnifications of objects beyond standard-lens proportions. Let's see what this can mean!

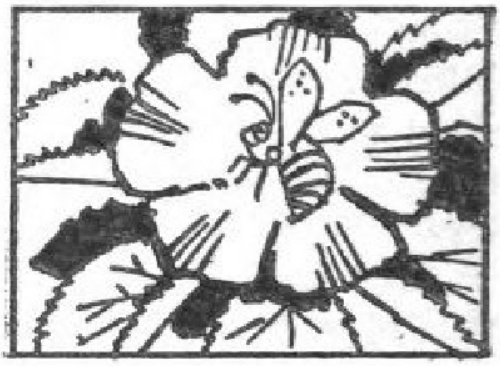
The chief advantage of a telephoto is usually thought of as r-e-a-c-h-i-n-g out for distant or timid targets, such as birds or wild game, or to give you a front-row view of sports events. This they will do—to the degree of their magnifying properties. Equally useful is their ability, when used at moderate distances, to capture unposed and even unsuspected close-ups of people. Yet, actually, they're probably at their best when making extreme close-ups of flowers or any other small objects. The standard lens of an 8mm camera, for example, will span an area about 8½ inches wide, if it can be used at a 2-foot distance. A 2-times telephoto will cover this same area at 4 feet, and at 2 feet narrow it down to about 4 inches. A 3-times telephoto will cover the 8½-inch field at 6 feet, and at 2 feet narrow it down to about 2½ inches. A 4-times telephoto will span that 8½-inch area at about 10 feet, and a mere 1½-inch field at 2 feet. There are even telephoto lenses offering greater magnifications. This is really pulling things in. Imagine the results as blown up through

" real as life . "

most movie cameras have
e same sighting job . Yet ,







A telephoto lens is useful for "pulling in" distant subjects and capturing close-ups of unsuspecting subjects.

projection onto a movie screen several feet in width! Here, indeed, are movies which it would be a gross understatement to call "real as life."

▶ *Time for a tripod*

There's one caution in order for telephoto shooting. Sighting must be both accurate and rock steady! To take care of the former, most movie cameras have viewfinder systems which show the fields of all the lenses they'll accept. If not, there are usually finder masks which do about the same sighting job. Yet, telephoto filming can be contrasted to standard-lens shoot-

and you may still bring
itted with a telephoto lens
n order when shooting

ing by comparing the two to the difference between bagging game with a shotgun or with a rifle. A little wobble with the former, and you may still bring home supper—but not when firing an unsteady rifle. The same is true with the visual results obtained by a jittery movie camera fitted with a telephoto lens. Although we've said that a tripod is not essential for everyday filming, it or some other substantial support is very definitely in order when shooting with any lens offering more than a 2-times image magnification.

where you use them - for

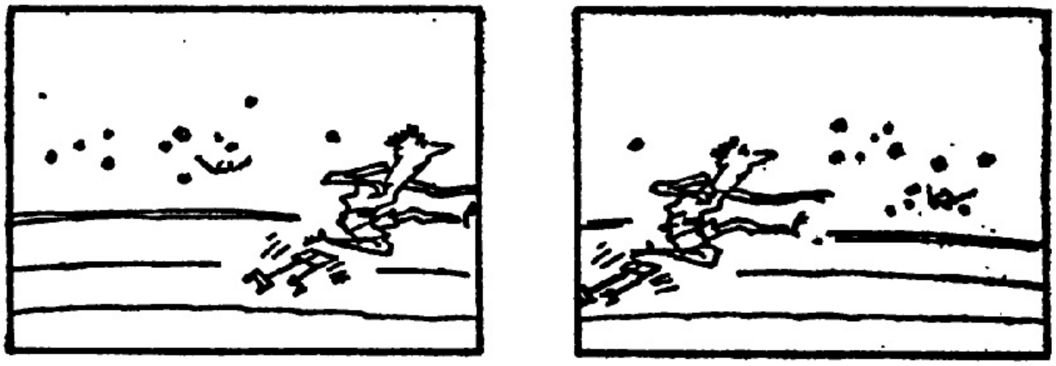
ting to look at than another .
hrough practice - created

CHAPTER
9

So Much for the "What"— Now, from Where?

ENOUGH about the tools for outdoor moviemaking and about how they work. Equally important is the matter of how and from where you use them—for movies should be not only colorful and crisp but also attractively composed.

A lot could be written about photographic composition, about why one view of a subject is so much more pleasant and arresting to look at than another. The paintings of masters are prime examples of good composition, but the artists—perhaps through genius, yet more probably through practice—created their own composition. You don't have to. Your camera's finder composes it for you. What you see in it is what you'll



Always leave room for the subject to move *into* the picture area.

miniature in a camera finder
l in a camera's finder .

obviously right !

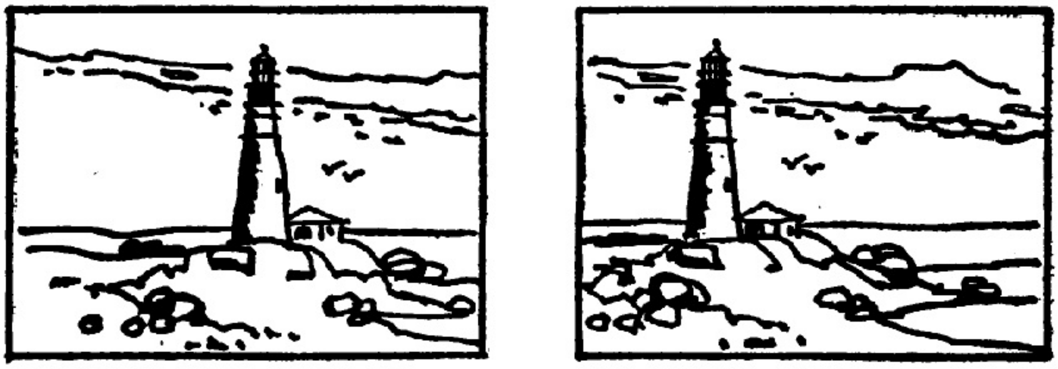
e youngster from his , and
oving into the picture
newhat from one side . A red
rasting size and coloring to
owards so that the sky and

get on your film and see on your screen. And so, while almost any full-color image is appealing, especially when viewed in miniature in a camera finder, don't be trigger happy! Although not everyone can create good composition, most of us can recognize it when we see it framed in a camera's finder. Move about with your camera before squeezing off your shots. Move back . . . move in . . . step a bit to one side or the other . . . climb up on a rise of ground or squat down. Suddenly you'll see the image that's obviously right!

Records may not show it, but the chances are that the very first good movie made of a child was taken by a camera trained on the youngster from his, and not the parent's, eye level. Action shots are automatically recognized as being better when the action is captured while it is moving into the picture instead of moving out of it or being dead center. The same is true when faces, even when stationary, "look" into a picture somewhat from one side. A red barn shown against a blue sky is obviously of more appeal when shot a bit off center with, probably, some other object of contrasting size and coloring to balance it across the screen. A blue sky itself will often suggest that you compose many of your shots by sighting your camera upwards so that the sky and clouds become a colorful backdrop rather than a less flattering or more confusing background.

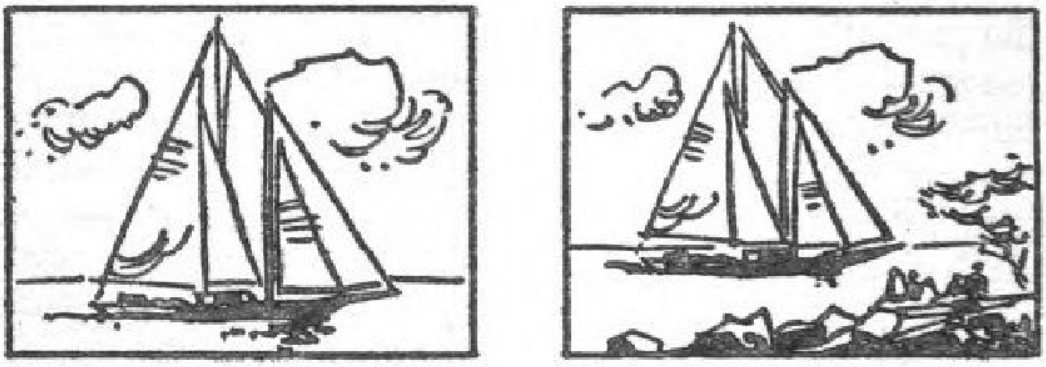
You've frequently shaded your eyes when looking at

WHICH WAY DO YOU PREFER THE LIGHTHOUSE—



Centered or at one side? The latter looks better, has more pleasing balance.

scenics, and vistas became more attractive. This is not just because you masked out bright light, but because the shadowed area at the top of your eye-picture brought contrast to the scene and gave you the feeling of looking *into* it and not just *at* it. The same effect, as you'll quickly appreciate, is achieved in movies by taking a filming position that enables you to shoot past some nearby object—a tree trunk, the corner of a building, a member of your group, even a solitary fence post—and when you back up a little in order to frame a distant view below the branches of a tree, or from under a porch roof or through a window.



You could shoot this sailboat from the end of the dock—but it's better to move back and include some foreground to give the scene depth.

Then there are scenics. Here you have two distinct picture elements—land and sky, or perhaps water and sky—with the horizon as the dividing line. Offhand, it might seem that a good place for the dividing line would be across the middle of the picture. But it isn't, as you'll promptly appreciate when you look at a scenic in a camera's finder. Things just *look* better when the horizon's either high or low in the picture—high, when the foreground's more important to you than the sky; low, when the chief appeal of the shot is the towering formation of sky and clouds. This is both good sense and good composition.

There are no secrets to it. Someone has said that anyone who can hang a picture at the right spot on a wall can take a well-composed picture. And that's true —as is the fact that the borders of your camera's finder

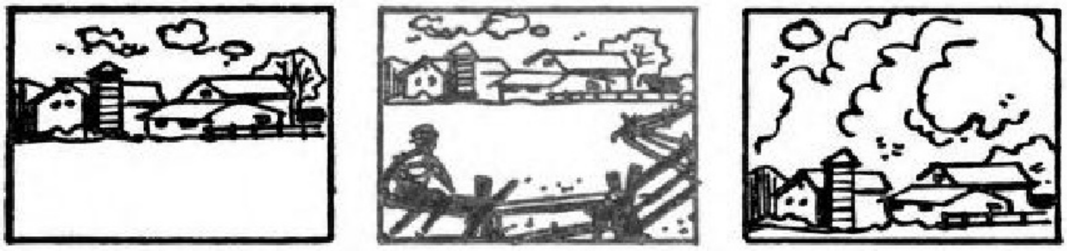
a at the top of your eye -
kly appreciate , is achieved
ng , a member of your group
n under a porch roof or

ne depth .

n as the dividing line .
promptly appreciate when
n the foreground's more
good sense and good

nposed picture . And that's

ust right at first , move



Whether the horizon line is high or low depends on where a scene's interest lies—but don't put the horizon square across the middle.

represent the frame of every picture you'll make. If things look right there, they'll look right on your screen. And if they don't look just right at first, move the picture "frame" to a vantage point from which they do. When your eye signals, "Hold It!"—SHOOT.

hese awe - inspiring
erally rise or set - right on

h and color to clouds , or
burns away the haze born of
ls , or at just below the

5.6 to wide open , can
by clouds so that you can
and its light and color only
or 2.7

CHAPTER 10

▶ *Shooting the Sun*

Just about the most beautiful movies of all are those made of sunsets—or of sunrises, if you're up and around that early. These awe-inspiring spectacles of nature are especially impressive in color movies because, if you film them in a series of shots, the sun will literally rise or set—right on your living-room screen.

The real objective in such moviemaking, of course, is not just an image of the sun, alone. It's when its ruddy rays lend warmth and color to clouds, or haze or fog, that sunsets and sunrises really come into their own—during those morning minutes, for example, before the sun burns away the haze born of cool night air, or the water-hugging fog on lakes or ocean and, morning or night, when the sun is either masked behind clouds, or at just below the horizon, with its brilliance shared and diffused by ground haze.

Daylight Type Kodachrome or daylight-filtered Kodachrome, Type A Film is the filming formula. Exposures, ranging from 5.6 to wide open, can safely be based upon experience, as are the following suggestions: when the sun is fairly well up, bright, yet partly hidden by clouds so that you can look at it without eyestrain, 5.6 or 4 is usually the lens opening to use; when, at these moments, the sun is fully behind clouds and its light and color only are reflected in them, about 4 will probably be right; when it's closer to the horizon, yet masked by light clouds or haze, 2.8 or 2.7

; crimson eye , the same two
: , 1.9 will usually turn the
'hen the color , although fast

ır sunset shooting , with
it , the screen results will

even minutes apart , it's
ıth of the sun will not jump
h if you use a tripod or a
en shots . This also suggests
onderful color , " but , "
: and sunset shots that will

should do it. When the sun is right on the horizon and so thoroughly filtered by ground haze that you can easily stare right into its crimson eye, the same two apertures are your best bets. But when it's just beyond the horizon and its only light is that reflected upwards on clouds or haze, 1.9 will usually turn the trick—and, if your camera's lens will open wider to 1.6 or 1.4, you can continue to shoot throughout those dimmer moments when the color, although fast fading, still appeals to your eye and camera.

▶ *Practice soon makes perfect*

These exposure suggestions, although usually successful, are admittedly not entirely precise. A little experience in sunrise or sunset shooting, with exposure notations made at the time and later compared with the results, is a quick and effective tutor. Even when you err a bit, the screen results will usually suggest only that you shot a minute or so earlier or later than you actually did.

There's this about sunrises or sunsets, too: as you'll seldom make but one shot of them but, rather, a series of shots seconds or even minutes apart, it's wise to have your camera zeroed in from the same, fixed vantage point, if at all possible, so that the upward or downward path of the sun will not jump to left or right in your movies. Such steadiness, of course, is next to impossible with a hand-held camera. But it's easy enough if you use a tripod or a fence, a rock, a railing or any other steady support on which you can place your camera for sighting and careful winding between shots. This also suggests that it's important to make the right choice of viewpoints. It is—for you want your movie audiences to say not merely, "What wonderful *color,*" but, "What a beautiful *picture!*" The rich coloring born of the right exposure is certainly a factor—but it's the *composition* of sunrise and sunset shots that will determine whether they are merely attractive or are breathtakingly impressive. For this reason, sea-

ing some object or objects in
ı their cameras " into " the
, to ask a companion to step

soned shooters pick their viewpoints carefully. Whenever possible, as it usually is, they seek contrast in their scenes by having some object or objects in the foreground that will stand out in stark silhouette against the flaming backdrop. They are less likely to walk forward with their cameras "into" the scene, more likely to back up so as to frame or accent the sun's color with the contrast of a nearby branch or building or simply to ask a companion to step forward into one side of the scene.

s . For so many subjects ,
ɜ to introduce the setting of
way to close a movie than by
ınrise or sunset footage may
ır reel !

▶ *Always pleasing—always useful*

Then, too, sunrise or sunset shots are worthwhile film fare not only because of their beauty but also because of their usefulness. For so many subjects, they're the easy and natural way to indicate the start or the end of a day, a film sequence or a full reel. What better way is there to introduce the setting of some outdoor adventure or holiday than by a first glimpse of it shown against the light of very early morning? And what better way to close a movie than by a vista in which a setting sun writes "finis" to your film? Indeed, you can frequently use some editorial license here. Your sunrise or sunset footage may be shot miles or months apart from the other scenes in a movie story, and then be drafted over a splicing block to punctuate your reel!

nd friends — and even that
hat moviemaking is no
tion before it .
shows , boxing or
g signs and scurrying car
ssible . You shoot with
ooting at wide apertures .

CHAPTER
11

Sports, Shows and Other Nighttime Spectacles

CHANCES ARE, the first time you cradled a home-movie camera in your hands, all you ever expected of it was to capture a lifelike record of family and friends—and even that seemed to be asking a lot of such a small and unassuming little picturemaker. With your very first films, however, you learned that moviemaking is no trick at all, that all your camera asks is enough light to see by—and not very much of it at that—to record promptly the color and action before it.

Even so, we'll wager it never occurred to you that this same camera, with equal ease, could bring home the excitement of stage shows, boxing or wrestling bouts, night-club entertainment, ice extravaganzas, the circus, fireworks displays, lighted fountains and the glittering signs and scurrying car lights that line the corridors of any city's gay white way.

But it can—and beautifully!

Again the film to use is Kodachrome, Type A. The lens openings, almost invariably, are 2.7 or 1.9 or at times even larger, if possible. You shoot with what light there is. You focus, if you've a focusing camera, for your range of sharpness in depth is not at its peak when you're shooting at wide apertures. Even though an exposure meter, if you have one, could be of help, here are subjects with which it's rarely possible to get close enough to take useful readings. Camera finders and meters must span the full scene before them, and meters, therefore, cannot concentrate on the action that's the core of your shots and for which, alone, correct exposure is important. An exposure meter, or a photocell camera for that matter, would tell you that movies can't be made of a distant pair of spotlighted carnival skaters. Not true at all! The lighting of most of these fine movie opportunities is surprisingly uniform. Thousands of home-movie cameras have captured them from coast to coast—and here is how they've done it:

First, let's consider sports events. In color movies, the range is pretty much restricted to that of action within the squared ring, and here, almost invariably, the lighting is ample and concentrated. With any lens, and at any distance, best results will usually be enjoyed by shooting at 2.7 or 2.8. You won't want to be too close to the boxers or wrestlers either, for then the lights themselves might shine downward into your lens. Mid-distance is best. But, if you're equipped to make an occasional telephoto shot, by all means do so—and, because the distance of camera to subject has no effect upon exposure, at those same lens openings.

There are other sports events which, at times, can be filmed in color movies. Hockey is one example, but over-all lighting varies from rink to rink. Here, a meter *could* be of help, or you can simply try a shot or two the first time you bring your camera to a game. As a rule, however, the lighting is borderline—almost certainly not bright enough for 2.7 and probably not bright enough for 1.9, although perhaps 1.6 or faster would get it if your camera's so equipped. The same is usually true of basketball, indoor track or aquatic events, and almost surely of night baseball or football where even bright lights are dissipated by distance and turf.

Although ice hockey is doubtful, ice *shows* are, as a rule, very much within your reach. Now the lighting is

annot concentrate on the
nera for that matter , would
ine movie opportunities is
lone it :

and here , almost
shooting at 2.7 or 2.8 . You
Mid - distance is best .
ct has no effect upon

ries from rink to rink .
owever , the lighting is
uld get it if your camera's
ball where even bright

frequently concentrated upon performers under white or colored spotlights. When the spots are white, and surely when the costumes of the entertainers are also bright, wonderful color movies can almost always be made at 2.7 or 2.8. When the spots are colored or the costumes under white spots are dark 1.9 will turn the trick. With shots such as these almost certain to be bagged by your camera, you can also shoot for contrast some of the floodlighted views of the full company in somewhat dimmer lighting, even though they may not be fully exposed—but at 1.9 or, if possible, even faster!

These exposure suggestions will do almost equally well for other similar spectacles, such as the circus. Once more the difference is made by the frequent use of spotlights to concentrate the lighting and interest. With the circus, however, over-all views are less promising for the obvious reason that tanbark reflects little of the light which, in hockey, is bounced back upon the ice performers. If, once again, spots or bright floods are in play, the lens openings we've proposed will also do for night-club entertainers and in the theater—about 2.7 for the brightest, 1.9 or faster when the lights, the costumes or both are darker. By stage shows, of course, we're talking about brightly-lighted musicals, not about dimmer dramas or whodunits.

Even before you go indoors, there's lots to be filmed in color! For one thing, outdoor signs can so often title the fast-moving action to be filmed within. Your best bet is 1.9. The same wide lens opening will do nicely for shots of car headlights, blinking signs and the shadowy crowds hurrying to make game or curtain time. If you've a chance to shoot them on some rainy evening, so much the better—the mirror of shining black pavement will almost double the color and action. For the signs, themselves, you've a choice. If they're made up of hundreds or thousands of individual light bulbs, 2.7 or thereabouts is usually best. If they're floodlighted, try 1.9.

tumes of the entertainers are
r white spots are dark 1.9
of the floodlighted views of
ster !

nce is made by the frequent
obvious reason that tanbark
in play , the lens openings
ights , the costumes or both
.

action to be filmed within .
wds hurrying to make game
ent will almost double the
t bulbs , 2.7 or thereabouts

► *Lighted fountains, buildings and monuments*

Now things are a little "iffy." Your camera's widest lens opening is your safest recourse as a rule, but if the lights are really bright and the surface they're playing on is also light colored, 2.7 is a more certain choice. Maybe you can meter things, if you can get close enough. You can *not* make movies of very large floodlit things—like Niagara Falls. But if, by now, you've many of these nighttime opportunities under your moviemaking belt, your eye will do a remarkably accurate job of exposure estimation.

► *Fireworks and fires*

Fireworks displays are seldom unexpected. You can have Kodachrome Film, Type A, in your camera, and you should. Because chances are, you won't know what's coming up next in a fireworks program, the safest plan is to shoot wide open, and the best wide open is 1.9. Yet some effects are extra-bright, extra-white. For these, when possible, 2.7 can be a happier choice. As usual, please remember, it doesn't matter how near or how far you and your camera are from the excitement. Most of your picture areas are going to be pitch-dark, anyway—you want the exposure right only for the bright spots.

Fires are something else again. There are campfires you build yourself for comfort or cooking—and these you'll want to shoot wide open with either Daylight Type or Kodachrome, Type A, in order to get the flames and everything about them as bright as possible. Most other fires—house, barn or factory—are unexpected. You may have either kind of color film in your camera. Type A is a bit faster and more realistic, but Daylight Type will do. Out-and-out "three-alarmers," when flames fill a good part of your camera's finder, may be best at 2.7 with Type A, but when flames are more on the angry-red side—and for any

ght and the surface they're
an not make movies of
king belt , your eye will do

chances are , you won't
ome effects are extra -
near or how far you and
ght only for the bright

de open with either
ires - house , barn or
Daylight Type will do .
en flames are more on the

r this , really , is what

fire shots made with daylight-type color film—best results will come from 1.9.

Pretty talented, these home-movie cameras? You bet they are. But give a large part of the credit to the film you load into them. For this, really, is what takes the picture and, thanks to its uniformity, the exposure that proves right one time will always be right the next!

cene follow another ,

can make subjects and
funniest thing ever to come
yway , they really perch
ackward and upward
The basis of the stunt is to
out and turned around

CHAPTER
12

There's Real Magic in Your Movie Camera

IN A SENSE, all movies are magical because they're so exciting to see, and so wonderfully easy to make.

Yet, movies also make possible a special magic, much of which springs from the fact that movie audiences, seeing one movie scene follow another, readily assume that they were shot at the same place—that this was the way the action really occurred.

Far from it—when a movie camera takes trick shots!

Many movie projectors, as you know, have a reverse control by which you can make subjects and action go backwards. For some reason that's never been too clear, most adults and all youngsters think such antics just about the funniest thing ever to come down the pike even though, having just seen the normal action, they know full well you flipped a switch, to put it in reverse. Anyway, they really perch on the edges of their chairs when, without warning or projection shenanigans, a diver pops, feet first, out of a pool and soars backward and upward onto a springboard. For mystification such as this—and you can think of many applications—the shenanigans are in the shooting. The basis of the stunt is to film the action with the camera held upside down. And the resultant footage, after the film has been processed, is simply snipped out and turned around end for end in the reel. With 8mm film, because the perforations are on but one side, you must also turn the film over, which of course reverses the action from left to right as well. It also needs a momentary refocusing of the projector lens. But, for most trick shots, what matter?

There are all manner of opportunities for using this gag—a boy and his bike, for example, lifts itself off the lawn at the snap of his fingers and rolls over to his waiting hands. Of course, in life, it really didn't. You shot it with an upside-down camera as he simply pushed it away from him. Or, you can have a youngster take a running jump right over a wall or fence that's as high as his head. For this, he'll actually make *two* jumps. The first, which you shoot with an inverted camera, is from the top of the wall, made backwards toward his take-off side—and after landing he takes one or two fast backward steps. This part you'll flip around in the reel. His second jump, also from the top of the wall, but off the other side, is jumped straight and shot straight. After a little judicious trimming of a few of the wall-top frames over a splicer, he'll seem to stride forward . . . crouch . . . and vault right over the top!

Even more useful and mystifying is the ruse known as "stop-motion" filming, which can be effected in either of two ways. One is to shoot normal action by the abnormal method of flicking the camera's exposure button so that only one, or two or three frames are exposed at a time. The other is to make reasonably normal exposures between which, however, a bit of skulduggery is performed. Have you ever looked down from a high building at scurrying crowds far below? Ever observed that they looked like so many startled ants? Well, if you position your camera firmly so it doesn't change its view between exposure "flicks," you can make your unsuspecting targets scamper about on the screen in highly satisfying fashions. Their pace will be determined by the spacing of your staccato exposures. This shooting style also does a fine job with the boats and ships of busy harbors, with children

to right as well . It also
fingers and rolls over to
him . Or , you can have a
irst , which you shoot
or two fast backward
aight and shot straight .
t right over the top !
is to shoot normal action
The other is to make
high building at
so it doesn't change its
s . Their pace will be
rbors , with children

dium . Some movie cameras
very few of their normal 16
ɔp - motion movies , to set

pouring from school doors when classes are out, with crowds hurrying from parking lots toward the turnstiles of a football stadium. Some movie cameras have true, single-frame controls for such filming. Most don't —yet, a light fingertip on their exposure buttons will expose but a very few of their normal 16 frames per second. Although fully-wound movie cameras quickly get up to normal running speed, it's wise, when making stop-motion movies, to set the lens for one opening larger than usual.

ocus - pocus between shots
.22 repeater with which
n him squeezing off a series
a group of people who
finger off the exposure

▶ *Now you see 'em . . . and now you don't*

The mystery of the second application of this stunt—which again calls for a firmly fixed camera viewpoint—is born of a bit of hocus-pocus between shots. Here are some good examples. One is to make people or things abruptly appear or disappear. Maybe you've a boy with a new .22 repeater with which he's far from being adept? In movies, he can seem a Deadeye Dick. If his target's a row of cans on a distant fence, you can film him squeezing off a series of shots and then make the cans vanish one by one by removing them in the proper order between movie shots. Or maybe you've a group of people who persist in lining up for movies as though for a snapshot? Let them, but have them step into line, one at a time, as you keep your finger off the exposure button as each one takes his or her place. And, just as easily, you can make them vanish!

ı , a boy climbs out of it
ach new arrival . The trick ,

▶ *Still another version of stop-motion*

Even better, we think, is the stunt that centers around a clean barrel or cardboard carton. About boy-size. For, surely enough, a boy climbs out of it shortly after it appears on your screen—then another boy . . . and another . . . and another . . . to line up side by side and welcome each new arrival. The trick, of course, is to shoot with a stationary camera which captures the boys as they come out and ignores them as they climb in, and which is sighted from far enough back so as to span the necessary area.

Another arresting version of stop-motion filming is that of the abrupt change of characters behind some concealing object—a tree trunk, a pole, a building pillar. Perhaps, for this, a very large man with a very large umbrella strides purposefully up to and behind the masking object, whereupon, with no change in pace, out pops a very small boy under that same outsized umbrella, and continues in the same direction! The "mystery" here, of course, is to stop the camera when the man reaches the "mask," and to start the camera when the boy has taken his place and is ready to step out. Indeed, if the concealing object is broad enough, a generous-sized domestic auto can be transposed into a pint-sized foreign model. Very amazing stuff it is, too—to most every movie audience!

▶ *Duck!*

Another stunt has to do with glass—perhaps a house window, of which movie viewers will be unaware, but which they'll later be glad to learn is there. You and your camera are in the house. Just outside the window (on which you're careful to see there are no interior reflections) an energetic male is busily swabbing down the family car. As a final and logical touch he heaves part of a bucket of water onto the car hood—and then, without warning, turns and tosses the rest of it directly at the window—at your camera—at, to all intents and purposes, the faces of your movie viewers!

▶ *Fades and dissolves*

Although not quite under the heading of magic, fade-outs, fade-ins and dissolves are a proper part of any movie camera's repertoire. Some cameras even have built-in devices by which to accomplish them. For others there are accessories with which to achieve these effects. But any movie camera can do a very fair job in this department.

ree trunk , a pole , a
ng object , whereupon ,
" mystery " here , of
ready to step out . Indeed ,
Very amazing stuff it is ,

e glad to learn is there .
an energetic male is busily
hout warning , turns and
!

rtoire . Some cameras even
ny movie camera can do a

One way to make a fade-out is gradually to deny the film enough light to see by and to reverse the procedure for a fade-in. Outdoors, for the first, and with cameras equipped with an iris diaphragm, this merely requires that you close down the lens opening from a proper and fairly wide aperture to its very smallest—thus fading out the scene through underexposure. Reversing this routine will fade things in. Some movie cameras, instead of having an iris device, achieve their series of lens openings through varisized holes in a rotating wheel. With them, fades won't work nor will they with movie cameras with fully automatic lens-coupled exposure meters. But with the former, and with all average movie cameras, it's easy enough to make fades *indoors*. The trick here is to cut down the light itself for a fade-out, and to bring it up to normal for a fade-in, which merely requires an assistant armed with squares of cardboard with which to gradually mask off or unmask the light beams of photoflood lamps.

Another way of making fades, and even dissolves, as mentioned earlier, is to have someone puff a dense cloud of tobacco smoke directly before the camera's lens—two clouds, in fact, one of which fogs out the conclusion of one scene, and the other which "fogs in" the start of the next. A fairly close parallel is the technique known as the "swish pan." This, in addition to producing a rather tricky effect, is a helpful release from that constant urge to panoram a movie camera. A swish pan, as one application, is an interesting way of maintaining the continuity of an auto trip to a vacation site. You'll want to make it clear, we'll assume, that you *drove* there but you don't want to devote too much footage to the actual trip. So, every so often along the route, you stop the car to make shots of scenery—the outskirts of a city, highway signs that mark your progress—and after a few seconds of steady shooting of each you conclude them with a rapid s-w-i-s-h, at the end of which you lift your finger

(Continued on page 169)

doors , for the first , and
y wide aperture to its very
stead of having an iris
l they with movie cameras
igh to make fades indoors .
as- sistant armed with

e directly before the
f the next . A fairly close
om that constant urge to
a va- cation site . You'll
very so often along the
seconds of steady shooting

ler these conditions , set your

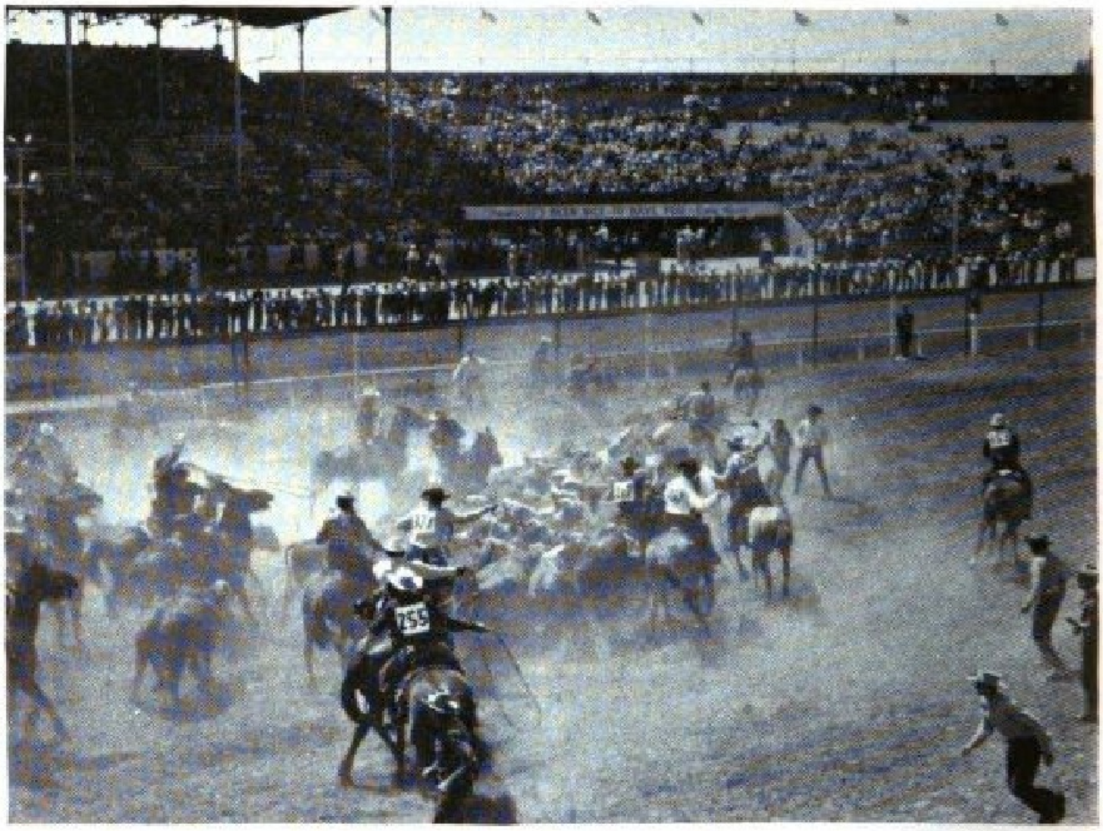
LOTS OF LIGHT

Large expanses of sunlit sand or snow are unusually bright, so f/11 is the correct lens opening. For close-ups of people under these conditions, set your lens halfway between 8 and 11.

the happenings , and you'll

YOUR TRAVELING CAMERA

From Santa's Village to the wrestling match, from snow to the rodeo — wherever you go, take the movie camera along to record the happenings, and you'll be glad you did!

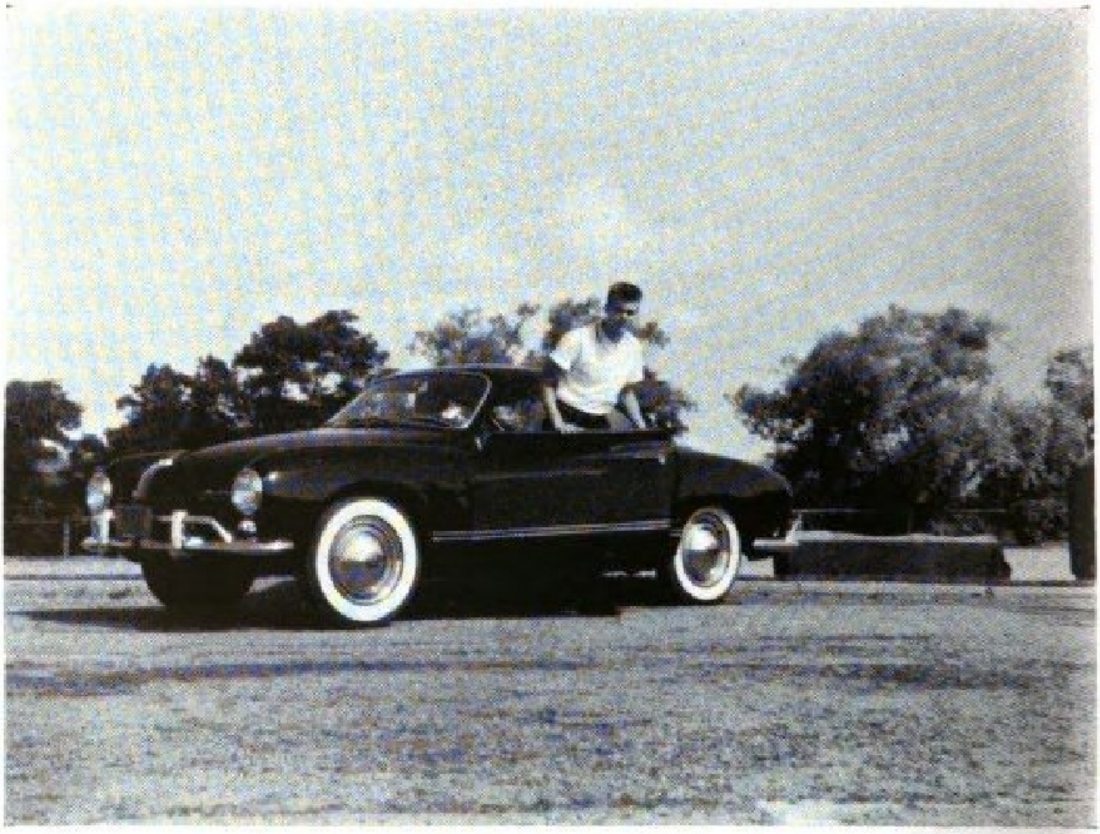


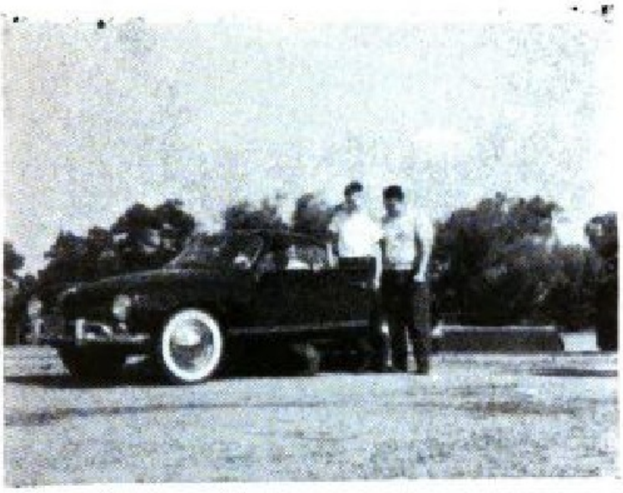
SANTA'S VILLAGE

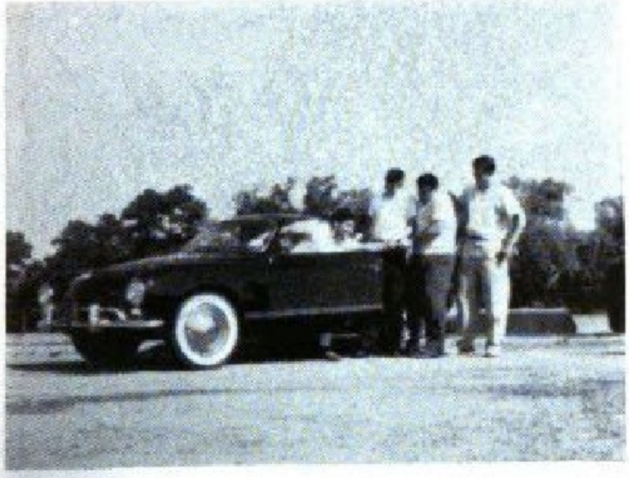
e first person emerges , then
ant people to come out . The

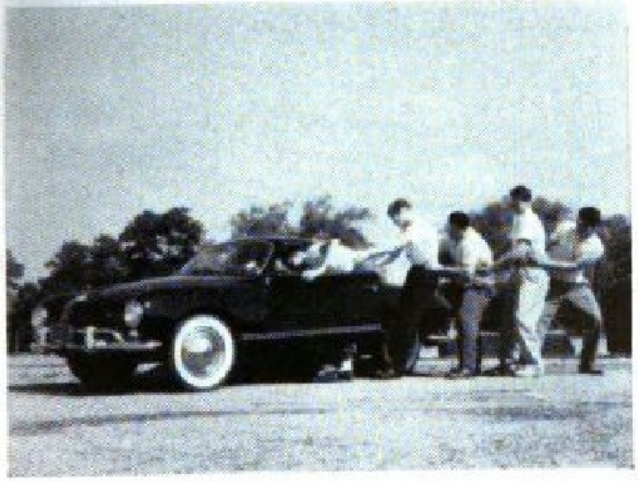
THE OLD CIRCUS TRICK

Here's an especially easy bit of movie wizardry you can perform. As the car pulls up, run your camera (on a tripod) until the first person emerges, then stop it. Let someone else get into the car while you're not filming, then shoot *his* exit. Repeat this for as many times as you want people to come out. The movie will give the impression that half a dozen people came out of one tiny car!









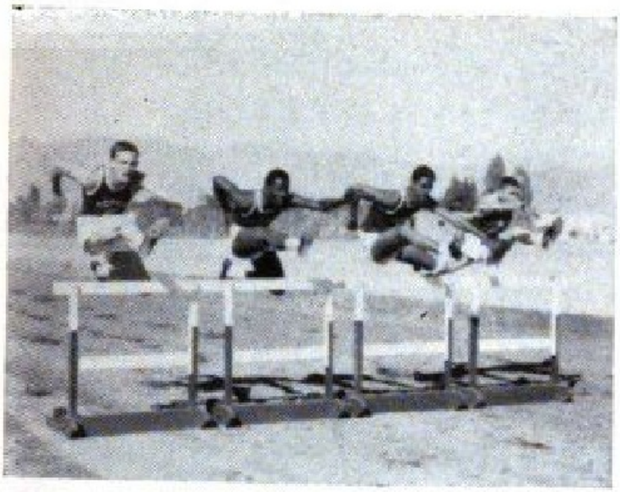
a variety of shutter speeds ,

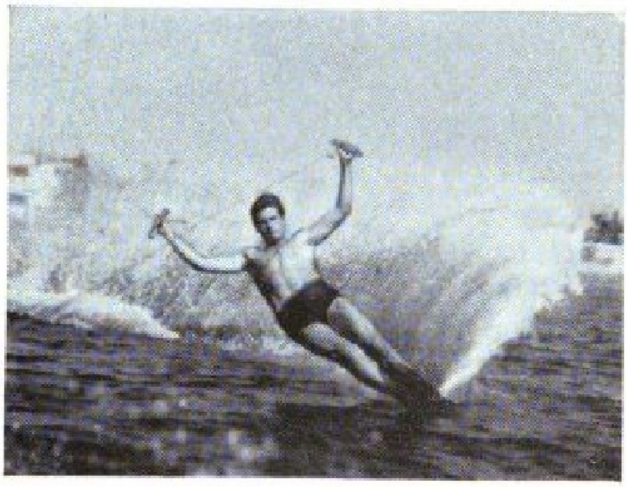
CAMERA—ACTION!

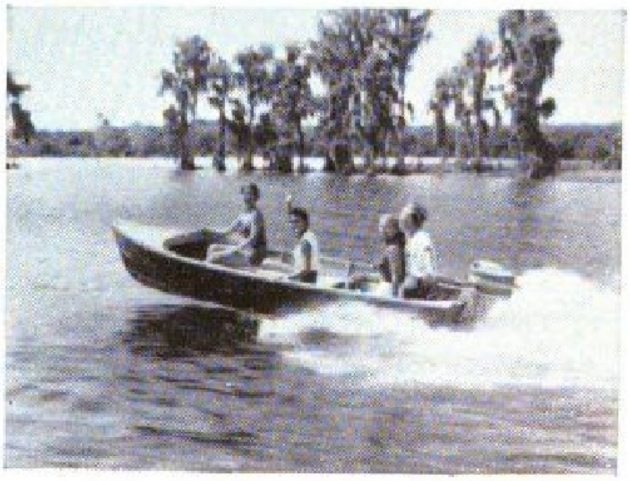
Your movie camera was made to photograph things in action. Subjects like these are a natural for your lens. If your camera has a variety of shutter speeds, try shooting at 32 or 48 frames a second to get slow-motion effects and smooth out the action.

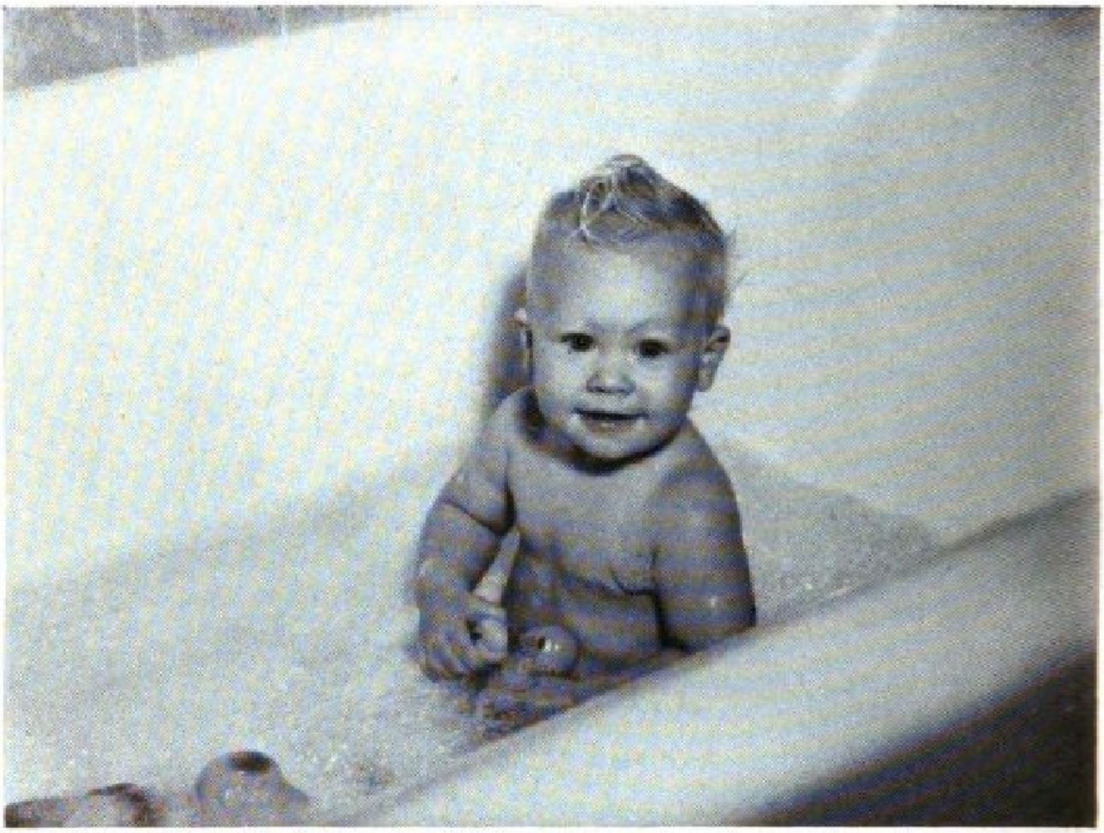
With all action subjects, remember to leave room in front of the subject so it can "move into" the picture area.

MARINE
STUDIOS





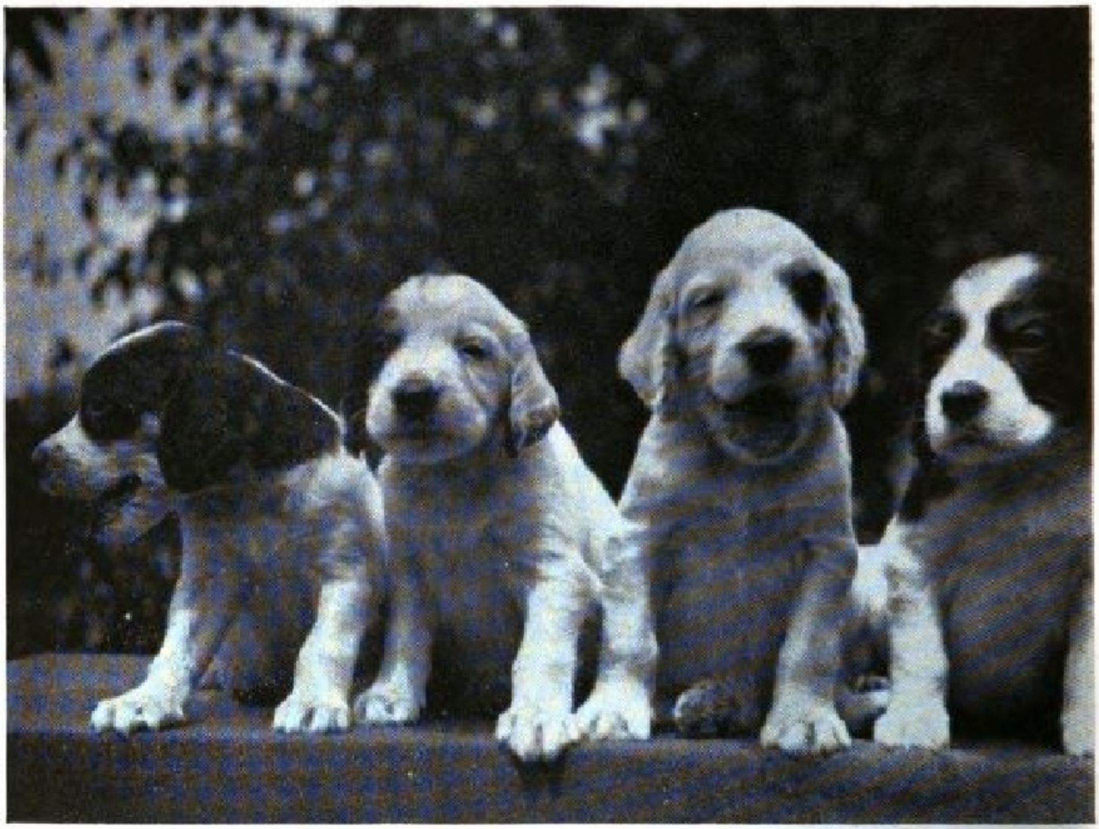




ıbjects as the big - city sky
ty on your screen .

MOVIES ARE WHERE YOU FIND THEM

Variety is the spice of movies as well as life. Vacations and holidays make fine movie fare, but don't stop there. Such diverse subjects as the big-city sky line, a favorite winter sport, baby in the bath, some cute puppies and a deliberately staged "gag" shot all make welcome variety on your screen.



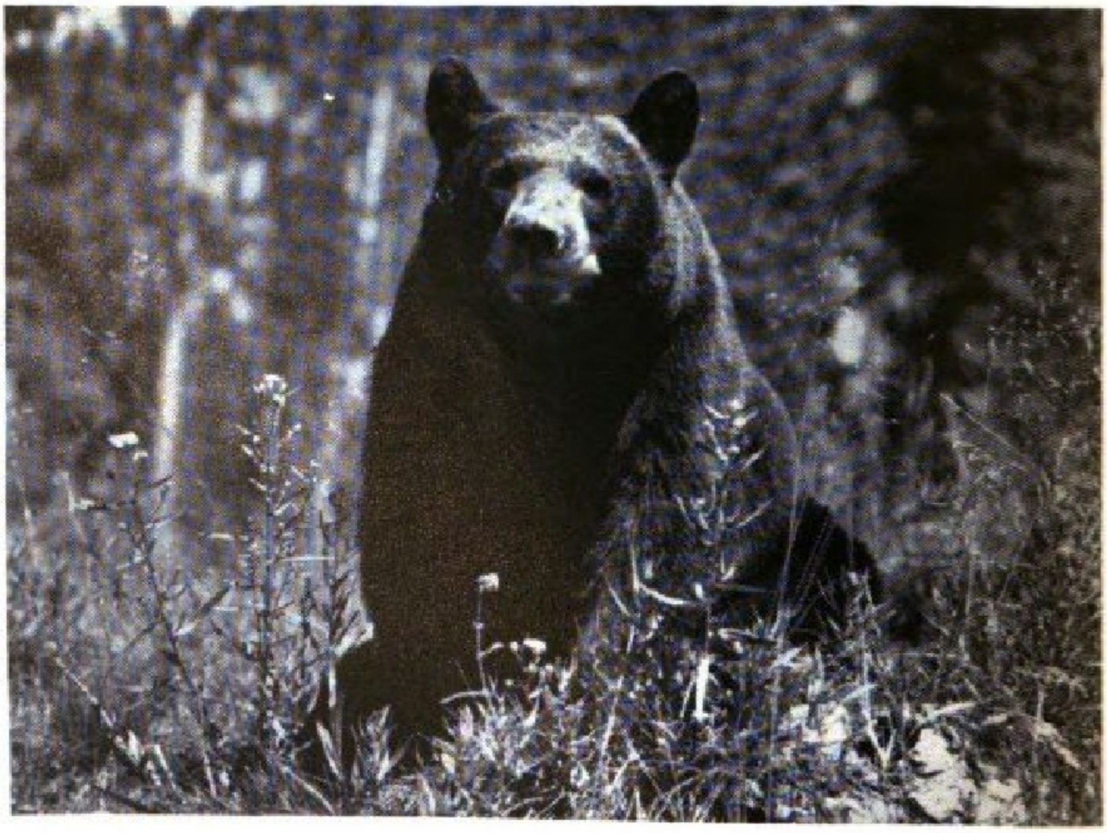
"THE HAPPINESS
OF YOUR LIFE
DEPENDS UPON
THE QUALITY OF
YOUR THOUGHTS"

hoto lenses magnify

TELEPHOTO TARGETS

Equipped with a telephoto lens or converter, your movie camera can "reach out" to photograph timid or elusive subjects. Telephoto lenses magnify camera jiggle as well as squirrels, so hold the camera steady by using a tripod or resting the camera on a fence or car window.

TELEPHOTO TARGETS



here ... to here . . . and

from this stunt comes
could be built around
d . Half of the spectators
competents . The other
bject gloom . When the
hen the opposing team
osts , your partisan

. All but one of your party
d be a candidate for con-

(Continued from page 156)

from the exposure button. When shown on the screen, your travel pace will be clear and lively, as you advance from here . . . to here . . . to here . . . and soon you're *there* where, it's to be hoped, your camera will resume normal shooting habits!

▶ *Just for laughs*

While not exactly a trick shot, there's a bit of movie magic in the filming technique known as a "running gag." The entertainment from this stunt comes from the repetition of a bit of action, or maybe no real action at all, at more or less regular intervals throughout a reel. One such could be built around the features of a nearby spectator at a football game. In your movies you first show perhaps one of the teams trotting out on the field. Half of the spectators erupt into frenzy but, from the bored expression of your neighbor, you know he rates these athletes as both mental and physical incompetents. The other team appears—and he goes mad! His opponents kick off and, when the runback is stopped in its tracks, your neighbor registers abject gloom. When the enemy scores, he evidences disbelief. When his team scores, he belabors the nearest onlooker with a crumpled program. And when the opposing team pushes across the winning touchdown and fans swarm onto the field to carry the victors on their shoulders and tear down the goal posts, your partisan rooter sits alone, chin forlornly cupped in his hands, his coat collar turned up to shield him from an unfeeling and unjust world.

That's a running gag.

It can be just as entertaining when nothing whatever happens. Perhaps you're on a fishing trip. You even catch fish—most of you. All but one of your party, in fact—he just sits and soaks a worm. Morning, noon and even into the night—he sits and soaks. Although here, surely, should be a candidate for con-

impse of him , faithful to his

agic !

solation, you'll find that movie audiences will greet his appearances on the screen with whoops of delight—especially a final glimpse of him, faithful to his fruitless cause, hunched over in his boat against the background of a setting sun.

Are movies fun? Sure they are. And they can be even more fun when they're laced, every now and then, with a bit of movie magic!

cessing station . It's a
if he's actually to see the

nat never ceases , as ,
ed the brightest of many

or what you really have

Regardless of how
' running time to expose

CHAPTER
13

Dressing Up Your Movie Footage

No question about it, the biggest moment in the life of every moviemaker is when he gets his first roll of film back from the processing station. It's a somewhat scary moment, too. For now, as he sets up projector and screen, nothing short of a minor miracle seems to be required if he's actually to see the targets of his camera in color and in motion.

Yet, there they are! Nine hundred and ninety times out of a thousand *there they are*—as big and as beautiful as in life. It's a thrill that never ceases, as, with the passing of months, that first roll is followed by others until there's a neat stack of small yellow cartons in which are captured the brightest of many family doings.

Wonderful? You bet they are. Yet, chances are, you can make them a lot more wonderful by chucking some of those shots away. For what you really have in those film cartons are not movies, but the *makings* of movies!

Why? For two basic reasons.

One is that the shooting capacity of your camera was never intended to be the yardstick of the showing usefulness of your projector. Regardless of how many hours or days it took you to use up a roll of film, your camera, if its film load is that of most cameras, took only four minutes' running time to expose it and your projector will take only four minutes to show it. With the camera, you then had to reload. But you don't have to—and shouldn't—reload your projector every four minutes. It will run an uninterrupted quarter hour of movies—and maybe a lot more, depending upon its reel capacity. And as fast as your camera has built up enough footage for assembly onto larger reels, you should transfer your films to larger reels. What an improvement it makes in projection ease, projection pleasure! No need for frequent reloading and rewinding on your part. No staccato lights-off, lights-on viewing for your movie audiences.

That's the *first* step in the improvement of the movie material collected by your camera. All that's needed to effect it are some extra projection reels and a simple film splicer.

▶ *First, film assembly—and then . . .*

The second reason why individual movie rolls are but the makings of finished movies is that, as shot, it's just about impossible for them to be in ideal showing condition. Let's, for the moment, make believe they *aren't* movies. Let's pretend they're snapshots—a whole batch of snapshots—the result of a season's shooting. Would you expect every last one of them to be a winner? Hardly. There will inevitably be a few in which something went a little wrong at either the subject's or the camera's end. So, what do you do with poor snapshots? You either throw these few away or put them to one side so that you can look at them every now and then, but nobody else can. Now let's pretend further that you've a mechanical device which can present the rest of your snapshots. First one . . . then a click . . . then a second . . . another click . . . a third, etc. Naturally, besides having disposed of those few which were something less than wonderful, you'd also do a bit of sorting of all the others so that they'd pop up in the most interesting order. Even if each snapshot were

- reload your projector
y . And as fast as your
rovement it makes in
ghts - on view- ing for your
xtra projection reels and a
for them to be in ideal
of snapshots - the result of a
ome- thing went a little
or put them to one side so
which can present the rest of
onderful , you'd also do a

of a different subject, and each stood on its own feet as a complete picture, there'd be a best way of assembling them to show. But no one movie scene tells a full story—each tells only part of it and then leads to the next. In movies, certainly, some discarding, some "sorting," will almost surely be in order if you and your films are to do you proud.

The shots you will want to discard may perhaps be those in which unexpected and unwanted action occurred—or the wanted and expected didn't occur. Maybe one of a duplicate—something you had to shoot twice to get the action you wanted. Maybe an exposure boner, which will crop up every now and then in the films of even the most experienced moviemaker. Other scenes, which may be over-long and drag their feet a bit, can be improved both in themselves and in stepping up the pace of a whole reel if trimmed a little, fore or aft. Still other scenes will benefit by rearrangement in a film. Mathematically sound or not, you'll find that, by a little attention to perhaps 10 per cent of your shots, you'll double the interest of the remaining 90 per cent of your movie footage!

This is the *second* step in the improvement of the movie material provided by your camera. This is movie editing—and for it, in addition to a splicer, you'll need a movie rewind and, very likely, a movie viewer.

▶ *The cost and use of editing equipment*

A movie rewind is just about what its name implies—an accessory by which you can hand-wind film, forward or backward. It consists of a base to hold two standards, each with a spindle to hold a film reel, and with a crank by which to spin the reel. Although it takes a camera to take the pictures, it's on the block of a splicer that movies are really *made*. Here, in fact, is where you put your best footage forward!

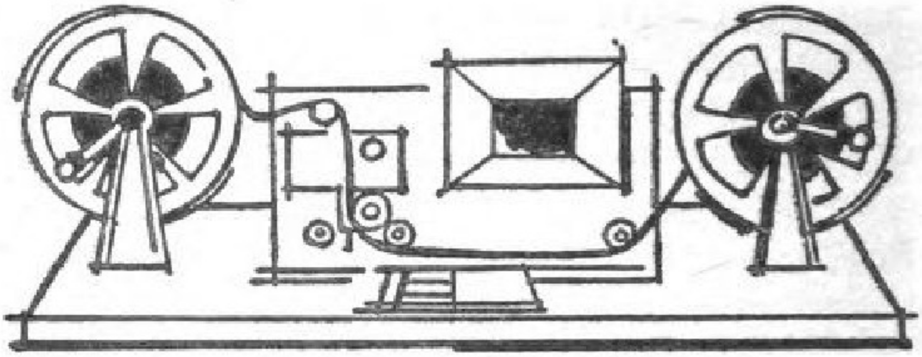
There is a variety of splicers available. The most inexpensive, costing but a dollar or two, will make just

3ut no one movie scene
ll almost surely be in
expected didn't occur .
l crop up every now and
be improved both in
ment in a film .
f the re- maining 90 per
ddition to a splicer ,
consists of a base to hold
ke the pictures , it's on

n cement or with film tape .
splicer , you then scrape off
will be made that won't "
of film ends . It makes its
ed . A simple unit to make

moviemaking for keeps , and
list of essentials .

d by the hand cranks of your



This editor-viewer is your key to smoother, more enjoyable movies. Movies are "made" here, not in the camera.

as good a splice as the more advanced types. But not as readily. Splicers, today, do the job by one of two methods—with film cement or with film tape. Both have cutting edges with which to trim the film ends to be joined, and cutting blocks on which to do it. With the cementing splicer, you then scrape off a narrow ribbon of film emulsion so that, when you add a touch of film cement to it and overlap the other film tip, a flat splice will be made that won't "jump" in your projector's gate and, therefore, on your screen. The tape splicer requires no scraping or cement or overlapping of film ends. It makes its weld with a strip of microscopically thin, adhesive film tape that's as strong and as long-lived as the film on which it is pressed. A simple unit to make and use, a tape splicer is also "easy" to buy.

For the assembly of movie film—and for the most elementary film editing—this is all the equipment you need. But, if you're in moviemaking for keeps, and if you want everyone, including yourself, to get all possible enjoyment from your reels, an editing viewer should be on your list of essentials.

▶ *So that you can see what you're doing*

A movie viewer, fundamentally, is merely a miniature movie projector, lighted by connection to a power socket, and operated by the hand cranks of your movie rewind to show real movies on its pint-sized screen as you wind film through it. Most viewers also have a notching device with which you can make harmless identifying nicks along the perforation track of your film—nicks which will tell you, once you've removed the film from the viewer and onto a splicing block, precisely where you want to make a cut and a splice. Although well worth their price, viewers do cost a bit of money. For this reason, and because a competent editing outfit, although little short of essential if your movies are to be at their best, is used but infrequently, many moviemakers "pool" their editing equipment. They buy an outfit jointly and borrow it back and forth. Not at all a bad idea either, especially because there are so many moviemakers in every community today!

▶ *What's the best editing procedure?*

There are several schools of thought here. But there's one easiest way to do it—and it goes like this: It's safe to assume that you know, in general, what's on each small roll of film. You probably also know the sequence you want them to follow on a larger projection reel. It's therefore suggested that, using only your rewind and splicer, you first make just one big reel out of several small ones, cutting out, as you go, all white leader strips except that on the first roll.

Now take a look at it. Not in the editing viewer, but with your movie projector and screen. Don't bother making any notes. Just *look* at it—not with the proud eye of a moviemaker, but, as far as is humanly possible, with the unbiased and objective eye of a movie onlooker.

Notice anything? See a few otherwise fine shots in which someone or something intruded a bit of action or expression that doesn't add a thing to your film story? See any unnecessarily long scenes? See any of those spur-of-the-moment shots or short sequences

hich you can make
e viewer and onto a
ney . For this reason ,
ly , many moviemakers "
use there are so many

ow , in general , what's
e suggested that , using
trips except that on the

ok at it — not with the

dd a thing to your film

which, although fine enough, you'd rather not have in your "show" reels? See short lengths of that blank, unexposed film that sometimes turns up at one end or the middle of a film roll?* If you're compiling a "growing-up" reel of each youngster in the family, do you see a shot or a sequence which you'd like to lift out for transfer to the child's own movie diary? See any of these?

Just to be sure, rewind the reel and run it again, if you care to. Hmm, there really are several spots where improvement can be made.

Now run the reel again—but this time with one hand on the projector's operating control, and the other holding a pencil poised over a pad. Whenever you come to a point where you want to trim or remove or discard a scene, just stop the projector for a moment and make a note. Nothing elaborate. Something as simple as, "Jerry diving—cut end"; "Sandra on slide—to her reel"; "1st sunset shot—too light!" Now rewind the reel and move it over to your editing outfit.

With another large projection reel ready to take up your film, thread it through the viewer and crank it away until you come to the scene for which your first note was made. Nick it alongside the exact movie frame at which you want to make your cut. If the scene's just to be trimmed, wind it forward to the spot that marks the end of the surplus action and nick it again. Then cut the film at both nicks, draw the ends together on the splicing block and weld them. When

---

*As was mentioned earlier, there's more footage on every roll of movie film than the length for which you paid. There's extra footage at the beginning and end of both 8mm and 16mm rolls, and also more in the middle of an 8mm roll so that you can turn over the film and reload. That's why it's there, so that, with a little care, you can load and unload your camera without having spoiled any of the proper and prescribed footage, and also for the safe handling of the film in processing laboratories. You can take movie scenes on some of this "plus" film—but all or most of them will inevitably be removed in normal processing procedures.

t sometimes turns up at one
r a sequence which you'd

made .

over a pad . Whenever you
hing elaborate . Something
l move it over to your

e scene for which your first
vind it forward to the spot
block and weld them .

ootage at the beginning and
t's why it's there , so that ,
also for the safe handling of
ably be removed in nor-

ɔlace the small coil to
ut on one of those small

:n you've done your best

w learned the benefits of

s your movie of one of
carefully and thoroughly
to shoot movies ?

kend as you tote a clutch
. placing a covered

you come to a scene you want to move forward or backward in the reel or to put aside for transfer to another reel, you can merely place the small coil to one side on a slip of paper that identifies it. But, if you're extracting a series of shots, take one of your large reels off a spindle, put on one of those small camera-length reels you've now at hand and wind your sequence onto that until it's ready for assembly.

Sound easy? It is. Editing, you'll find, is an enjoyable and completely absorbing pastime. But its brightest moment comes when you've done your best by your camera footage and you first see the edited reel on your screen.

This is more like it! These are *movies!*

You can stop right here—content in the knowledge that the good work of your camera has been made even better. Or, having by now learned the benefits of an hour or two given to movie grooming, you can add still more finish to your films!

▶ *Making extra shots for extra interest*

Does your movie of an adult back-lawn picnic start off with just a shot of several of your guests standing about and chatting? Does your movie of one of the children's birthday parties begin with a group of youngsters playing a game? Or have you a movie story of an automobile trip, carefully and thoroughly filmed, except for most of one day when it rained so hard you had all you could do to see the road, much less think of or find time to shoot movies?

You can easily tone them up a bit!

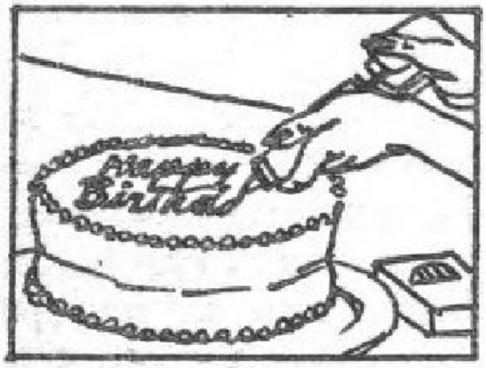
The picnic and birthday films begin somewhat abruptly. For the former, you can arrange to have a few shots made of you this weekend as you tote a clutch of paper and a bag of charcoal to your outdoor fireplace . . . a close-up of your hand striking a match . . . fanning the fire into flame . . . placing a covered platter close by the growing fire . . . carrying a trayful

camera fast while it's running .
nd the rest of your footage of
he cake ? Can you read the
he beaming youngster behind
ed up front . Or you can

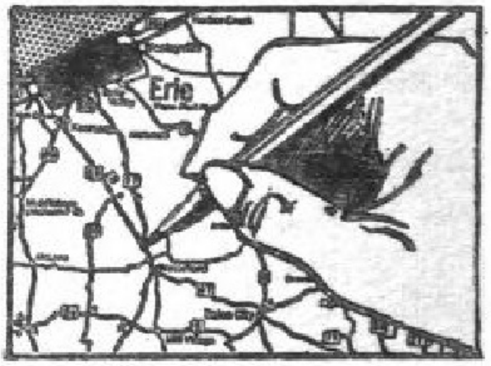
of glasses to a lawn table. You can conclude this series of introductory shots with a "swish" panoram made by swinging the camera fast while it's running. Splice these, a week or so from now, to the beginning of your picnic movie and then—presto!—there are your picnic guests and the rest of your footage of the event.

d whammo ! -you're a
ll , if , as is almost certain ,
cil

The answer to a start for the birthday film might be found right in the footage you already have. Did you make a close-up of the cake? Can you read the child's name—see and count the candles? Snip that out and put it at the beginning of your movie! Or, did you make a shot of the beaming youngster behind the lighted and uncut cake, as well as others of its cutting and serving? The former could be spared from where it is and moved up front. Or you can simply single out the cutest of the many birthday cards and shoot a close-up of this.



Put this scene at the beginning of your movie story for a fine "title."



Here's a good way to show the route of your vacation trip.

It's too bad about that gap in your auto trip. For there you are, trudging about the well-kept ruins of a Revolutionary fort—and whammo!—you're a hundred miles and many hours away, taking your ease on the terrace of a quaint roadside restaurant. But it's an easy hole to fill, if, as is almost certain, you've a road map covering your vacation route. Get your camera as close to it as your lens permits and make a shot of a pencil tip tracing the missing part of your journey. It's as simple as that!

Besides these story "holes," there will usually be a few "bumps" in a full reel of film unless its full capacity is devoted to one movie story. You feel these bumps when, without warning, you bounce abruptly from one movie topic to another—from several sequences of a beach party, for example, to another series of a new back-yard wading pool. A breather is in order. The easiest way of supplying this is simply to splice in a few bits of the blank, black, and unexposed footage you lopped off the end or the middle of one of your short rolls of film—thus achieving about the same effect as the turning of a book page at the end of a chapter.

▶ *How about titles?*

It's been said, and rightly, that the ideal home movie shouldn't require a single title. A "made" title, that is. Viewers of such films know whom and what and where the movie is about from the very first scene which, of course, can be a "title" of the type of that birthday-cake shot mentioned a while back.

But few of us can make ideal movies. Even though the projectionist can surely speak up every now and then, when showing the films, to supply a "who" or a "what" or a "where," opening and/or explanatory titles throughout a reel add a professional flourish to any movie story, especially to more important "feature" films, such as those of a trip—a big event, such as a wedding—or a spectacle, such as a parade or carnival.

The best titles, we still think, are those which can so often be made right along with the rest of the movie —shots of building plaques and of the signs along highways or that identify historical sites and places of entertainment. They're real, completely in character and easiest of all to shoot. Yet these aren't always available for every movie subject. For all such films,

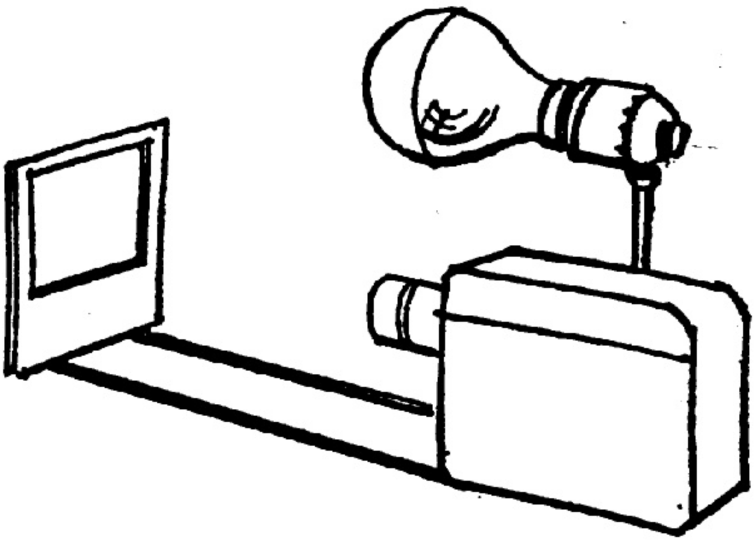
movie story . You feel
arty , for example , to
few bits of the blank ,
e effect as the turning of

s know whom and what
entioned a while back .

ms , to supply a " who "
specially to more

s and of the signs along
ot . Yet these aren't

od focus .
you need is an ingenious and
era's lens on a title easel a
se - up of the wedding
gram . Title material can be
ne product of your own skill
u can simply type them on
which , easy as not , you can



This is a movie titler—it includes a close-up lens, a light source and an easel to hold the subject at the proper distance for good focus.

you can easily make special titles both to launch them properly and to supply needed information throughout their lengths. All you need is an ingenious and inexpensive titling outfit.

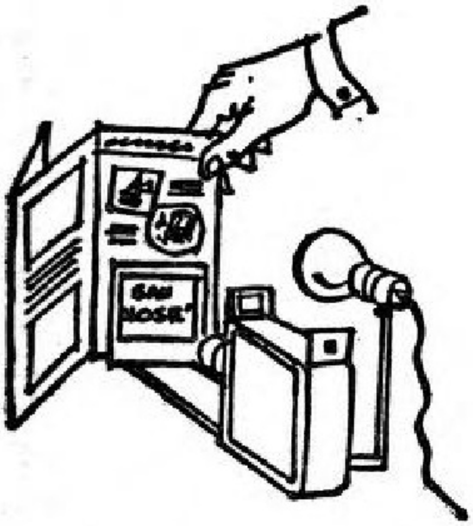
Most titlers consist of a base to which your camera is secured by its tripod socket, and a close-up lens that focuses your camera's lens on a title easel a few short inches forward which holds and aligns your title material. For that wedding film, an ideal title could well be a close-up of the wedding announcement; for a parade or carnival, a glimpse of a newspaper headline of the event; for a football game, a shot of its program. Title material can be almost anything—an area of a road map, your own Christmas card, a colorful swatch cut from a magazine or travel folder or the product of your own skill with brush or lettering pen. Titles can even be lettered with the alphabets to be found in cereal boxes. Or, easiest of all, you can simply type them on one of the cards supplied with most title outfits. Modern and low-cost titlers, too, frequently include special masks through which, easy as not, you can make porthole, keyhole, binocular and other professional effects. Titles can also include a bit of movie magic. If

scatter to all sides as
ow the letters from their
urn the camera upside
which you must also turn

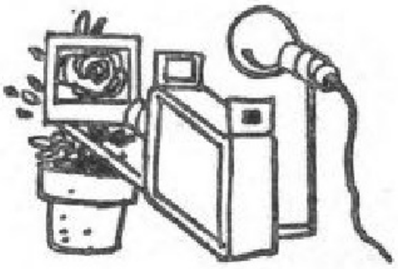
the titler and camera are upended so that the title card rests flat on floor or table, title wording, if alphabet letters are used, can scatter to all sides as soon as viewers have had a chance to read them—or they can even flutter in to spell out the title message! For the first, you just blow the letters from their position. For the second, you bring into play the reverse-action ruse described in our trick-shots chapter. Of course you don't turn the camera upside down when shooting—you letter the title upside down and then reverse the shot end for end in the processed film. With 8mm film, which you must also turn *over* to get the perforations in line, you letter a "flutter" title backwards from left to right.

pshot prints into your
zling the side of a

▶ *Nontitle uses of a titler*



Anything framed in a titler's easel can be copied easily.



This rose will fill the whole movie screen when the film is projected!

A full book could be written on title making—and on the many other uses of a titler. With a titler, for example, you can copy snapshot prints into your movie story, or copy any other small object or area—the moving hands on a watch face or a truly startling close-up of a fish nuzzling the side of a household aquarium.

More than one moviemaker has built up an entire reel of titler-framed close-ups of the many individual blooms to be found in any garden plot—close-ups that are thereby easily and crisply magnified a hundredfold onto home-movie screens!

The making of titles has been our subject here, and we'll conclude it with the caution that titling shouldn't be overdone. For most movies—*short* movies—an opening title will usually suffice. For other movies—feature movies—additional explanatory titles will frequently be helpful. Opening titles can be reasonably ornate in order to flavor the footage that follows. Most other titles should be "clean," even plain. Title wording should always be easily legible; title phrasing, simple. Titles should be short and not crowded and, when shooting them, keep your finger on the exposure button just long enough for viewers to read them without hurrying. Splice titles into your reels immediately before, and not during, the action they describe, so viewers won't have to backtrack mentally.

Title making, in short, can be a lot of help to movies —as well as a lot of fun!

▶ *The proper care of movie film*

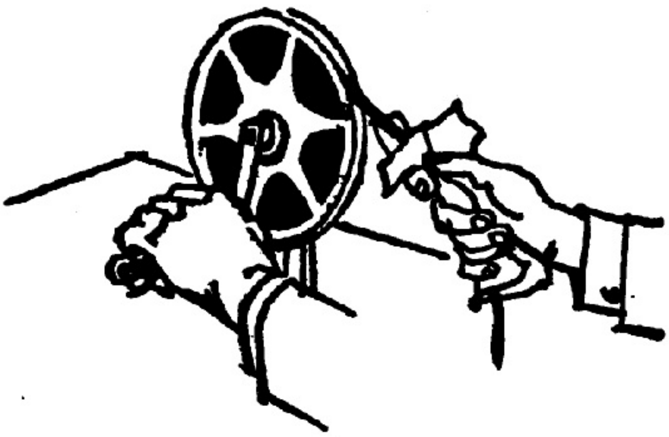
One question that's sure to pop into your mind the moment you see your first movies and learn how wonderful they are is, "How long will my movie film last?"

Frankly, we don't know. "Forever" would be too strong a word. "For years, and years and years" is nearer the mark. The first home-movie films, exposed over three decades ago, are still in perfectly good shape for projection. They were black-and-white, of course. The colors of early color film did indeed fade over a period of years, but great strides have been made in the permanence of color dyes since then. More recent Kodachrome Film, in testing laboratories, has been put through many years of exposure to nor-

ıny garden plot - close -
t movies - short movies -
l . Opening titles can be
hould al- ways be easily
ıre button just long enough
cribe , so viewers won't
v long will my movie film
ːst home - movie films ,
ː colors of early color film
ıt Kodachrome Film , in

mal "living"—and has not faded. It's believed that it won't for a long, long time. If film is stored with average safeguards against overhumidity and overheating, you need have little concern about the longevity of your movie library. There will be no need to humidify it unless you show your films with considerable frequency. Film should, in fact, be kept away from areas of considerable humidity—and away from extreme heat, too. An attic uninsulated against the sun's rays is no place for it, nor is a downstairs location over a radiator or where warm sunlight will strike it for many hours a day. In temperate climates, the average bookcase is a good bet, and so is the shelf of a closet on an inside wall.

Yet, wear itself can be a threat. During projection, treat film carefully to avoid torn perforations or scratches that come from abrasive dirt on the film or in the projector's gate through which film passes. Your projector's manual tells you how to take care of the latter, and the best way to keep film clean is to store it in dustproof film cans and keep it tightly wound. Tightly wound, that is, by projector or rewind—*not* by tugging it tight by hand, which, if there's already any dirt between its coils, is a warranted way to film scratches!



Occasional film cleaning removes the dust and smudges that might mar your priceless movies.

inst overhumidity and
ou show your films with
, too . An attic uninsulated
hours a day . In

asive dirt on the film or in
o keep film clean is to
hand , which , if there's

Even so, film is bound to pick up some dust and dirt, and it should therefore be cleaned periodically. Most times, this merely requires that, every now and then, you put your reels on a rewind and draw the film through clean patches of soft plush cloth held firmly but lightly against both film sides. At other times, film may actually become smudged. This calls for a bit of cleaner on your cloth. Not just *any* cleaner—for many, while undoubtedly efficient, would wash off color dyes —but special film cleaner, which your photo dealer either has or can get for you.

▶ *The best way to insure film safety*

There are other things, besides wear, that can happen to your valuable movie films. They can be lost. They can even be stolen. And, although movie film is not combustible or as easy to burn as a great many of your other household contents, home fires, comparatively rare though they may be, will destroy movie film. You've reasonably long odds that none of these disasters will overtake you and your movie library. But they *can*, and because all movie film, 8mm or 16mm, can be duplicated—although color dupes can be high in quality if the original films themselves are—we'd suggest that you give serious thought to the duping of those of your reels with which you simply couldn't bear to part. Not *all* your footage should be duped, but perhaps the growing-up films of the children, the once-in-a-lifetime vacation trip, the wedding movie. Then you can store the originals, in a safe or bank vault perhaps, and project the duplicates.

You may also want to consider dupes for other important reasons—for distant members of the family, for example, who would otherwise rarely or perhaps never have a chance to visit in your home. Letter writing, while fine enough, is but a pale and inadequate substitute for pictures in action and in color!

The cost of dupes? No more than that of an equal

requires that , every now
nst both film sides . At other
undoubtedly efficient ,
n . And , although movie film
they may be , will destroy
, and because all movie film
gest that you give serious
but perhaps the growing - up
or bank vault perhaps , and
ld otherwise rarely or
for pictures in action and in

amount of unused film, plus a reasonable charge for duplication and processing.

Well, enough about how to arrange your movies for showing. Every bit as important is *what* to show—and *how* to show it!

see your movies is
v and to how many you will
ly small screen , in a fairly
. So , the first consideration

CHAPTER 14

▶ Showing Movies—What All the Shooting's Been About

GETTING movies onto film is certainly the first step to home-movie enjoyment.

Putting them into the best shape to show is the second.

No less important is getting movies *off* your film so that you can see them to best advantage—and how well you and others can see your movies is determined by your choice of projector and screen.

Fortunately, just as is true of camera and film, this usually calls for but a modest equipment investment! It all depends on how and to how many you will show your movies.

If, as is generally the case, you'll screen your movies for intimate groups, a small-sized screen will be large enough. A fairly small screen, in a fairly small room, will give home viewers every bit as large a picture as most auditorium onlookers see on the largest screen made. So, the first consideration is the possible or probable distance of your projection "throw," which, in turn, decides the size of your screen images.

▶ How bright should your projector be?

Knowing, now, the size of screen images you'll use in showing your movies, you must next consider the choice of a projector that will produce adequate light and detail for screen images of those proportions. This doesn't at all mean "maximum brilliance," either. You don't, of course, want too little light, for then your images will be dull and lifeless. It's the amount of illumination that reaches the screen that's important, and not just the amount in the lamp house. This is determined by the efficiency of a projector's optical system, which not only decides how much light you actually get but also its corner-to-corner screen uniformity. You can best check these two points by looking at the screen illumination of unloaded projectors. When their light is indeed uniform, chances are, too, that picture detail will be as crisp in the corners as it is at the core—and you can soon prove this by running off a roll of film. What you'll probably discover is that almost any modern 750-watt projector and even some 500- or 300-watt projectors of reputable make will give you the quantity and quality of illumination you really need.

▶ *How much versatility can you use?*

All projectors, of course, will show movies and rewind the film for you at the end of a show. Some, however, will also show stills that permit you to "freeze" a beguiling close-up, attractive scenic, or split-second action on the screen. Some, also, will back up your movies so that you can readily review a scene you've just seen or provide amusing reverse-action effects not achieved with your camera. These, again, are usually projection advantages born more of alert projector design than of price.

▶ *How "easy" a projector do you want?*

Projection convenience is an important factor, too. All home-movie projectors are easy to use, but some are super-simple in operation. The position and number of operating controls are a consideration. Also, with some projectors you must change belts to rewind film, while

' maximum brilliance , "
ıat reaches the screen that's
ch not only decides how
at the screen illumination
s it is at the core - and you
d even some 500- or 300 -

stills that permit you to "
ɛs so that you can readily
ually projection

ɔperation . The position

with others you merely press a switch. The threading of film into sprockets and film gate can be either easy or extra-easy. And there are even projectors today which are completely self-threading—you simply tuck the tip of the film leader into a slot, flip a switch and, without again touching the projector, the show is on!

In addition to convenience, there's the matter of projector care. Although almost all cameras are prelubricated and rarely need any attention besides occasional cleaning of lens or gate, many projectors require thorough and periodic oiling. Others don't, they're lubricated for life. The more they're run, the quieter their oil-impregnated nylon gears become.

Some of these projection advantages understandably call for additional expenditures. But, once more, most are simply a matter of thoughtful projector design. This about totes up the projection factors which affect the ease, and range, and quality of home movies—with the all-important exception of a proper projection screen.

▶ *A good screen—always a projection "must"*

A good screen you simply must have—for, while a camera puts the picture on the film, and a projector gets it off, it's the quality of the reflecting surface on which you see the picture that decides to a considerable degree how good your movies will actually be. A movie-screen's job, in a nutshell, is to bounce back all possible light and detail. Most makeshift screens just won't. Have you ever, perhaps, viewed any movies shown on a window shade or on a tablecloth? Have you ever seen any thrown on a tinted wall? If so, the first probably appeared rather dim, as they inevitably would because every bit of light that goes through such "screens" is automatically lost to viewers on the projection side. Showing movies on tinted wall surfaces is just like shooting movies through a filter of the same color—yellow or cream walls, for example, turn beautiful blue skies a bilious green.

d there are even projectors
ain touching the projector ,
d any attention besides occa-
The more they're run , the
r of thoughtful projector
important exception of a
ty of the reflecting surface
s job , in a nutshell , is to
wn on a window shade or
ably would because every bit
ll sur- faces is just like
en .

creens have a beaded finish
y suggests a comparatively
It also suggests that both
n so that it will bounce
the softer and more
do a lot better job for
ney can readily be made .
desk blotter . And so , for

for showing your movies in

your holidays . Just the

It's just as well, therefore, that good screens needn't be expensive—their prices depend largely upon their size. Most modern screens have a beaded finish—a very efficient reflecting surface that returns light almost directly back along the path by which it received it. This obviously suggests a comparatively narrow viewing angle with movie viewers seated just in front or in back of the projector, rather than to the sides of the screen. It also suggests that both projector and screen are established at the same height and that this height is the eye level of onlookers. Tilting a beaded screen so that it will bounce light back at an angle just doesn't work. This is why some moviemakers prefer, and some projection conditions recommend, the softer and more diffusing surface of a matte screen. While not as efficient by the there-and-back yardstick of a beaded screen, matte surfaces do a lot better job for viewers who either must or prefer to sit at either side of a screen. Matte screens, too, can be bought at reasonable prices, or they can readily be made. The dull side of any pure white paper or smooth paperboard does very nicely. So will an adequately large rectangle of white desk blotter. And so, for that matter, will an area of smooth, *white,* flat wall finish.

Yet, there's still one other factor that influences the brilliance and quality of screened movies—*darkness.* There is good reason for showing your movies in a completely darkened room. Any stray light from indoors or outdoors will naturally reduce the brightness of your screen.

▶ *Home movies for home folks*

So now you're all set to show your movies. But *which* movies? To *whom? How?*

Let's first consider the "which" and the "whom" of the matter.

You like every foot of your movies, and why shouldn't you, for in them are the brightest hours of your family, your friends and your holidays. Just the

portant to you with the
themselves - with their

h to talk at great length to
mily activities . Well - taken

e ; onlookers , arranged like
vn in your home , with no
depths of a living - room
ou risk a pointless
tion of the reels you'll show .

act , as they probably are .

way things happened. Just the way you'd like to remember and relive them—and you'll find that they become increasingly important to you with the passing of every month and year. You'll learn, too, that the most fascinating film fare of all to your children will be movies of themselves—with their gleeful enjoyment of them growing greater as they grow older!

Yet, after all, most of your movies are a *personal* film record made by you and yours, for you and yours. Just as you'd be loath to talk at great length to casual friends and neighbors about your family, so should you be careful not to expose them to a prolonged screen review of family activities. Well-taken movies of a vacation, a trip or a voyage, spectacles or sports—these make an ideal movie menu for any audience.

▶ *The "how" of showing movies*

Professional movies, and for a very practical reason, are shown by a rigid formula. Screen—up there; projector—back there; onlookers, arranged like so many peas in a pod—lined up between the two. But yours are *home* movies. Part of their appeal is that they are being shown in your home, with no pretense of competing with the efforts of Hollywood studios. Not only will your audience prefer to see them from the relaxed depths of a living-room chair or davenport—or even from the casual comfort of floor and pillow—but also the more informal your shows are, the less you risk a pointless comparison with professional movie products. Have your projector and screen handy, by all means. Make an advance selection of the reels you'll show. But, other than this, keep the tone of your movie screening as free of ceremony as possible.

One other item—before we forget it!

You'll want to know that the reels you'll show will run without incident. That, for example, all splices and perforations are intact, as they probably are. So, if you don't want to project your films for yourself in advance, why not whip them through a cleaning cloth

tor . You won't need a
gency splicer will do - and

amps , like splices , have
heck yours every now and
d it .

e efforts . You can , for
special occasions , you may
lent and sound 16mm films .
ly arrange to rent one ,
uch as a child's birthday
nore they seem to enjoy it .

and your film rewind? Even then, such being the perversity of things, it's always wise to have a splicer close by your projector. You won't need a complete editing outfit—that'd be like setting forth in your car for a pleasure jaunt with a tire jack in your lap—just a little emergency splicer will do—and some projectors now have their own built-in splicers to care for rare emergencies.

Also, the better part of projection valor is a check of your projector's lamp. While it should last for reel after reel after reel, lamps, like splices, have been known to choose awkward moments to "go." Projection lamps, like all lamps, tend to blacken and dim with use, so check yours every now and then and always before a "big" show. Remember also to keep a spare on hand as the best of all assurance that you won't need it.

▶ *Party-time programs*

Our previous cautions about professionalism to the contrary, there are times when you can make good use of professional movie efforts. You can, for example, add "sound" of a sort to any movie by playing appropriate phonograph-record selections in the background. For special occasions, you may even want sound movies. There are, as you probably know, lightweight and extremely efficient projectors which show both silent and sound 16mm films. You may even have decided upon one as *your* projector, if you shoot and show 16mm movies. You can, if you want, probably arrange to rent one, together with a program of sound films—and you can easily learn how to *run* one—for those special-occasion movie shows, such as a child's birthday party. Youngsters just naturally love to see movies. In fact, the more often they've seen a cartoon, a comedy or a Western the more they seem to enjoy it. And what a help a movie show can be to a busy host or hostess at a gathering of active and excited children!

Rental or loan sound 16mm films will make a hit with many an adult get-together, too. Many photo dealers, special sound-film libraries and perhaps your community's general library have scores of reels from which you can choose. Drama, comedy, travel, adventure, sport—the list is almost endless, and a big reason why more and more "home" moviemakers are equipping themselves with sound projectors. Some of these, besides showing professionally made optical-sound films, also show personal silent movies to which, if you like, voice commentary can be added through a microphone, or musical background through a plug-in jack and a record player. Others show magnetic-sound films that you actually make with the projector—and see and hear as soon as you've made them! All you need is to have inexpensive magnetic striping added to the edge of your silent films. Then you thread them up in a magnetic-sound projector and pick up a "mike" to talk your commentary right onto the film. You can play music onto the sound striping with full volume and clarity, or you can play it on to register softly, then back up the film and run it through again as you talk your commentary right "over" the modulated music. Most of these magnetic-sound projectors, in fact, will show three kinds of movies: silent, optical-sound and magnetic-sound added to silent films!

Yet most home movies, for most home moviemakers, will merely reproduce life's color and action. Which is a modest and very satisfying miracle in itself.

Good luck—and good movies!

ilm libraries and perhaps
- the list is almost endless ,
besides showing
dded through a micro- phone
with the projector - and
nt films . Then you thread
onto the sound striping with
mmentary right " over " the
and magnetic - sound added

y satisfying miracle in itself

Glossary

h moviemaking .

›sition slightly from frame to

ble diaphragm or a disk

y .

▶ Glossary of Photographic Terms

These definitions are not technical or exhaustive. They merely define some common photographic terms used in connection with moviemaking.

Amateur Photographer—One who takes photographs for enjoyment, not as a means of livelihood.

Angle—The angular coverage of a lens, or how much of a scene it "sees." *See also* **Camera Angle.**

Animation—Making inanimate objects or drawings appear to "move" by photographing them a frame at a time, changing the position slightly from frame to frame.

Aperture—The area in a lens system through which the light passes to make a picture. Aperture size is regulated by an adjustable diaphragm or a disk containing holes of different sizes. Apertures are calibrated in *f*-numbers.

Artificial Light—Illumination from tungsten lamps, used to make movies indoors.

Automatic Camera—A camera with a built-in mechanism that automatically adjusts the lens aperture to expose the film properly.

Back Lighting—Light coming from the rear of the subject, as distinguished from front and side lighting.

Background—Anything that appears behind or beyond the main subject in a picture.

Camera Angle—Standpoint or direction from which a scene is viewed.

Close-Up—A picture in which the main subject fills the whole picture area, usually made by putting the camera close to the subject.

Composition—The arrangement of the scene within the picture area.

Continuity—The relationship of one scene to another that gives a movie a logical sequence or helps it to tell a story.

Depth of Field—The distance between the nearest and farthest points that are in sharp focus in a scene.

Diaphragm—A device for adjusting lens aperture.

Duplicates—Copies of your movie films made by a processing laboratory.

Editing—Rearranging the scenes of a movie to put them into a more logical order and to eliminate fogged or worthless lengths of film.

Exposure—The amount of light that reaches the film. Exposure is controlled by the lens aperture (*f*-number) and the shutter speed (frames per second) at which the movie is shot.

Exposure Meter—A photoelectric device that translates the brightness of a scene into camera settings that will produce well-exposed pictures.

F-Numbers—A system for marking the size of lens apertures. The smaller the *f*-number, the larger the lens aperture.

ıbject .

ıf film .

speed (frames per second)

xposed pictures .

Field Case—A case, usually leather, designed to hold and protect a movie camera.

Film—An emulsion of gelatin and light-sensitive silver salts coated on a flexible transparent base.

Film Cement—A special adhesive used to join lengths of movie film.

Film Cleaner—A solution used to clean and lubricate movie film.

Filter—A disk of dyed gelatin, colored glass or gelatin sandwiched in glass. It is placed over the camera lens to filter out certain colors of light.

Fixed-Focus Lens—A lens which has been pre-focused during manufacture, and which has no provision for changing the focus.

Focal Length—Distance from the lens to the film when the camera is focused on infinity. Focal lengths are usually expressed in millimeters (mm); a 13mm lens is a "normal" lens for an 8mm camera.

Focusing Lens—A lens with an adjustable focusing scale that can be set to make sharply focused pictures of subjects at various distances.

Foreground—The area between the camera and the subject.

Frame—The individual picture on a strip of movie film.

"Garden Hosing"—Spraying the camera around as though it were a garden hose—a poor habit!

Gate—The device behind the lens of a camera or projector which holds the film flat as it travels past the lens.

Highlights—The brightest areas in a scene or picture.

in colors of light .
cus .
n millimeters (mm) ; a
listances .

ght . The lens system on a

Infinity—In a photographic sense, infinity is any distance beyond 50 feet.

This is called parallax . The

Leader—Film used at the beginning of a roll to protect the footage containing pictures.

Lens—A disk of optical glass or other transparent material, which is ground concave or convex, and thus can focus rays of light. The lens system on a movie camera consists of several of these individual lenses or lens elements.

Lens Converters—Auxiliary lenses that slip over the camera's regular lens for making wide-angle or telephoto pictures.

Light Bar—A device for holding a movie camera and photoflood lamps when making indoor movies.

Magazine—A metal container holding movie film, supply spool and take-up spool.

Pan or **Panoram**—Swinging the camera in a slow arc to photograph a large area or to follow an object in motion.

Parallax—When the viewfinder and the lens in a camera are separated, each sees a slightly different view at close distances. This is called parallax. The lens should be tipped up slightly when making close-ups to overcome parallax.

Perforations—Holes in the sides of the film, used to drive the film through the camera and projector.

Photofloods—Incandescent lamps of high photographic efficiency used for making pictures indoors.

Photography—The recording of images by the action of light.

Portra Lens—A Kodak supplementary lens that fits over the camera's regular lens and permits extreme close-ups to be made.

Processing—Chemical treatment of the film that transforms the latent image into a visible and permanent image.

Projector—A device for showing movies on a screen.

Pulldown—A clawlike device in a camera or projector that engages the perforations in movie films and drives the film past the lens.

Reflector—Any device used to reflect light onto a subject.

Reverse Action—Projected action that appears on the screen in reverse order from the way it actually happened.

Running Gag—A bit of action repeated at frequent intervals throughout a movie to build humor.

Screen, Beaded—A projection-screen surface for movies or slides composed of thousands of tiny glass beads bonded to a white base.

Screen, Matte—A projection-screen surface for movies or stills with a flat or "dead" white finish.

Shutter—A mechanical device located between the lens and the film that keeps light from reaching the film except when pictures are being made.

Shutter Speed—The rate at which movies are exposed. "Normal" speed is 16 frames per second. Faster speeds, such as 24, 32 or 64 frames per second, produce slow-motion effects.

Slow Motion—The slowing down of projected action by making movies at faster-than-normal speeds and projecting them at normal speeds.

lens .
ite base .
s are being made .
32 or 64 frames per second
t normal speeds .

Speed-
le

s movies are made .

Splicing—Attaching lengths of film together with special cements or tapes.

Spool—The device that holds the film in a movie camera. There is usually a supply spool that feeds film to a take-up spool as movies are made.

Tape Splice—A film joint made without cement by applying a special adhesive tape to both sides.

Telephoto Lens—A lens that magnifies the subject and lets you get big images of distant subjects.

Trailer—Film used at the end of a roll to protect the footage containing pictures.

Tripod—A three-legged camera support.

Tripod Socket—A threaded hole in the bottom of the camera, used for attaching the camera to a tripod or light bar.

Turret—A device fitted to the front of some movie cameras, designed to hold two or more different lenses.

Viewfinder—The part of the camera that lets you see what will be included in the picture.

Wide-Angle Lens—A lens that includes more of the scene from a given point than the "normal" lens supplied with the camera.

Zoom Lens—A lens of variable focal length that lets you "zoom" from wide-angle to telephoto shots in one continuous motion.

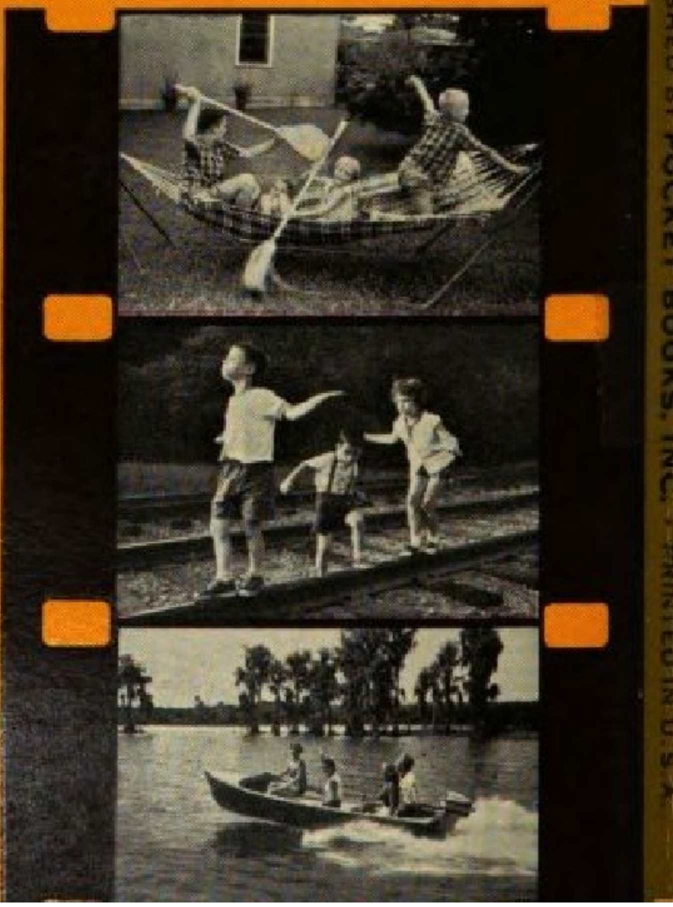
The Ohio State University
3 2435 05851593 3

THE OHIO STATE UNIVERSITY BOOK DEPOSITORY
D AISLE SECT SHLF SIDE POS ITEM C
8 04 22 27 7 15 014 9

era to editing and

This lighthearted book tells you the things you need to know to get the most fun out of home movies—everything from choosing a camera to editing and splicing. It tells how to make good movies inside and outside—full-color, moving-picture stories of your own family and friends.

Here's how to have more fun with YOUR movie camera.



PUBLISHED BY POCKET BOOKS, INC. · PRINTED IN U.S.A.